

Hanwha Group

Hanwha will continue to embrace bold challenges for a sustainable tomorrow.

Founded in 1952, Hanwha continues to grow by quickly anticipating and responding to rapidly changing business environments with a balanced business portfolio that includes aerospace, energy & materials, finance and retail & services. As of 2021, we are the seventh largest business enterprise in South Korea and a Fortune Global 500 company.

Hanwha has become global leaders in its arenas by strengthening core competitiveness and securing future growth engines based on sound financial structures.

Sales
2021

69.3 ^{KRW}
Trillion

Years of History
Founded in 1952

70

Domestic affiliates
As of end of June 2022

93

Business Enterprise in
South Korea

Total asset basis, as of end of 2021

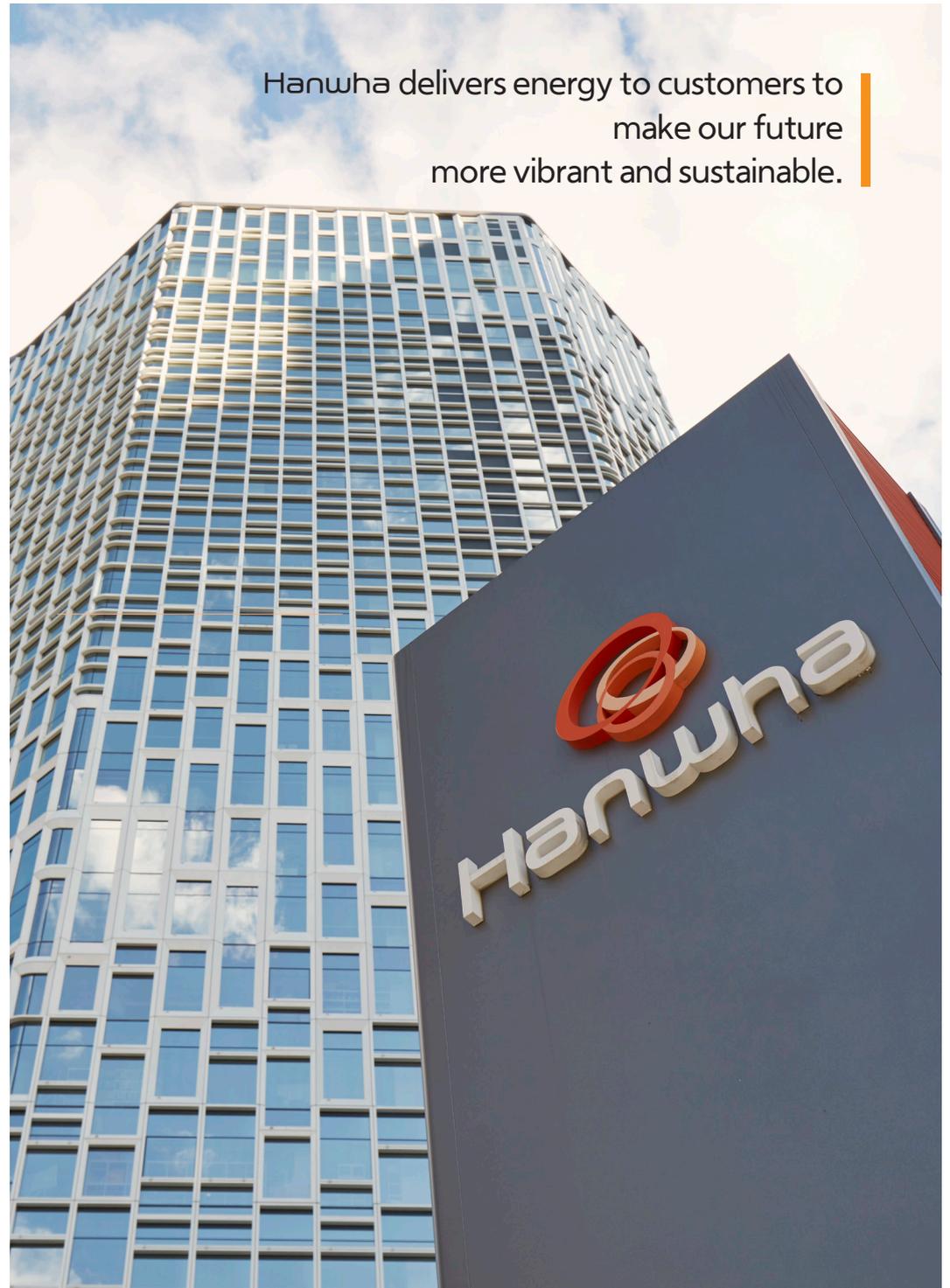
TOP 7

Ranking on Fortune
Global 500 in 2022

306

Global Networks
As of end of 2021

616



Hanwha delivers energy to customers to
make our future
more vibrant and sustainable.



Global vision solution provider

Over the past 30 years, we have established ourselves as a global video security specialist based on world-class optical design, manufacturing, and image processing technology .

We have been ensuring safety and happiness around the world and across society with products and solutions with outstanding performance, high reliability, and industry-leading cyber security policies.

For the past 30 years, all of our consideration all started with the customer. Starting with the desire to protect the safety of our customers and what they consider important, we now want to give them answers to their concerns.

We want our solutions to reach the visions of our customers.

We add innovation to our competitiveness, take the first step of challenge, and are now leaping forward as a vision solution provider.

History

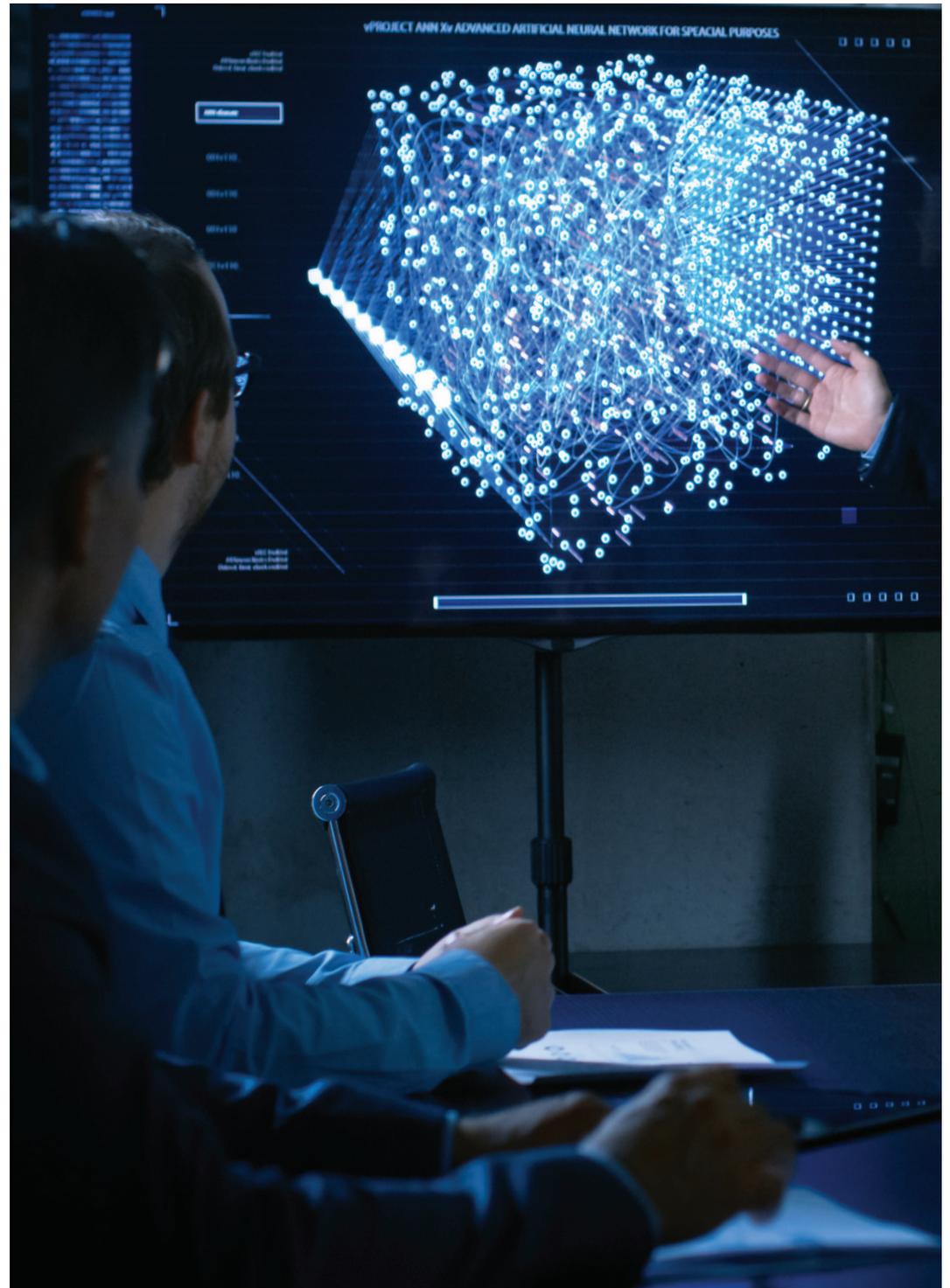
- 2023.03 – Changed company name to ‘Hanwha Vision’
Declared a leap toward being a vision solution provider Launched IP audio system
- 2022 – Launched the X AI camera series
- 2021 – Launched AI NVR and AI integrated solution
– Developed AI-based infectious disease response solutions
- 2020 – 30th anniversary of the video security business
– Launched the P AI camera series
– Launched Winsenet 7 SoC, a camera series with
Winsenet 7 SoC acquired UL CAP (UL Cybersecurity Assurance Program)
- 2019 – UK Government official cybersecurity certification
– Acquired ‘Secure by Default’
– Launched the world’s first 55x IR PTZ camera
- 2018 – Established Hanwha Techwin Vietnam manufacturing corporation
- 2017 – Winsenet 5 SoC and X camera series launched
Acquired CES, a UK Government cyber security certification
- 2016 – Establishment of Hanwha Techwin Middle East FZE
- 2015 – Launched Hanwha Techwin
- 2013 – Winsenet 3 SoC and camera series with Winsenet 3
SoC are launched
- 2012 – Launched the world’s first 37x IR PTZ camera
- 2009 – Establishment of Hanwha Techwin
Tianjin and Shanghai
- 2008 – Launched the world’s first 37x PTZ camera
- 2005 – Developed advanced intruder automatic
location tracking system
- 2004 – Developed Winner 3 Analog ISP chip
- 2001 – Establishment of Hanwha Techwin Europe
- 1997 – Launched the world’s best ultra-low illumination video surveillance camera
- 1993 – Developed Korea’s first Auto Iris lens for CCTV
- 1990 – Started video surveillance business, establishment of Hanwha Techwin America

R&D power

The headquarters R&D Center located in Pangyo Techno Valley, Gyeonggi-do, is the central axis of **Hanwha Vision**'s global R&D. Here, the commercialization of various vision technology-based solutions is being developed, and as overall preliminary research centered around AI and cloud is established, various preceding types of research are being conducted.

In 2022, **Hanwha Vision** established the Innovation Center in the US, a global hub, and is putting effort into developing key element technologies for future business, such as AI and cloud, which will become **Hanwha Vision**'s core competencies.

In particular, we have established a global AI R&D system based on the headquarters, the US R&D Center, and AI data lab, to secure the AI full stack capabilities from the AI strategy establishment to data processing, commercialization, and future element development, thereby accelerating R&D to equip sustainable competitiveness.



To ensure
24/7 reliability of our products,
we added smart manufacturing system
to our top technologies.



High-tech Powered in Vietnam

Hanwha Vision's manufacturing subsidiary in Vietnam (HVSV) has been in operation since 2018 in order to expand its global production capability as well as to strengthen cost competitiveness. Through automation and smart systems, Hanwha Vision has built sophisticated and fast-moving manufacturing lines producing all its product line-ups including cameras and storage devices. All products produced in HVSV go through a reliable manufacturing and quality assurance process and sold globally, these products represent 85% of Hanwha Vision's total sales.

End-to-end Cybersecurity

Hanwha Vision offers cybersecurity with the industry's highest levels of cybersecurity policy with secure boot/OS/storage, a signed firmware/open platform app, secure JTAG and more.

Hanwha Vision established its own device certificate issuing system to embed certificates into the product not only in the development progress but also in the manufacturing progress.



- Hanwha Vision Private Device Certification Root CA
- UL CAP, TPM 2.0 (FIPS 140-2)
- Secure Boot, Secure Storage, Secure OS
- Secure Open Platform
- S-CERT : Security Computer Emergency Response Team
Please contact S-CERT by e-mail (secure.cctv@hanwha.com)

※ Please ask your local representative for UL CAP, TPM 2.0 applied products

Next level Cybersecurity





AI based object detection & classification

Q series AI camera

Pixel based motion detection

Non AI camera

Q series AI Camera

Expand Q series with built-in AI

Increased accuracy of video analytics through people and vehicle detection

- AI based object detection (Person, Vehicle)
- WiseNR II, SSNR V, WiseStream III

Q series AI

QNV-C9083R, QNV-C8083R,
QNO-C9083R, QNO-C8083R,
QNV-C8011R, QNV-C8012,
QNV-C9011R



X series AI camera

X Plus · X Core lineup

AI-Enhanced X series Cameras

Object detection

Edge-based business intelligence

Improved image quality

Next level cybersecurity

User convenience

Reinforced durability

Featuring Hanwha's advanced artificial intelligence (AI) and deep-learning technologies, X series AI cameras offer industry-leading AI-based object detection for false alarm reduction analytics, AI-enhanced image quality and edge-based business intelligence.

X PLUS

XNO-9083R/8083R/6083R

XNV-9083R/8093R/8083R/6083R

XND-9083RV/8093RV/8083RV/6083RV

XNB-9003/8003/6003

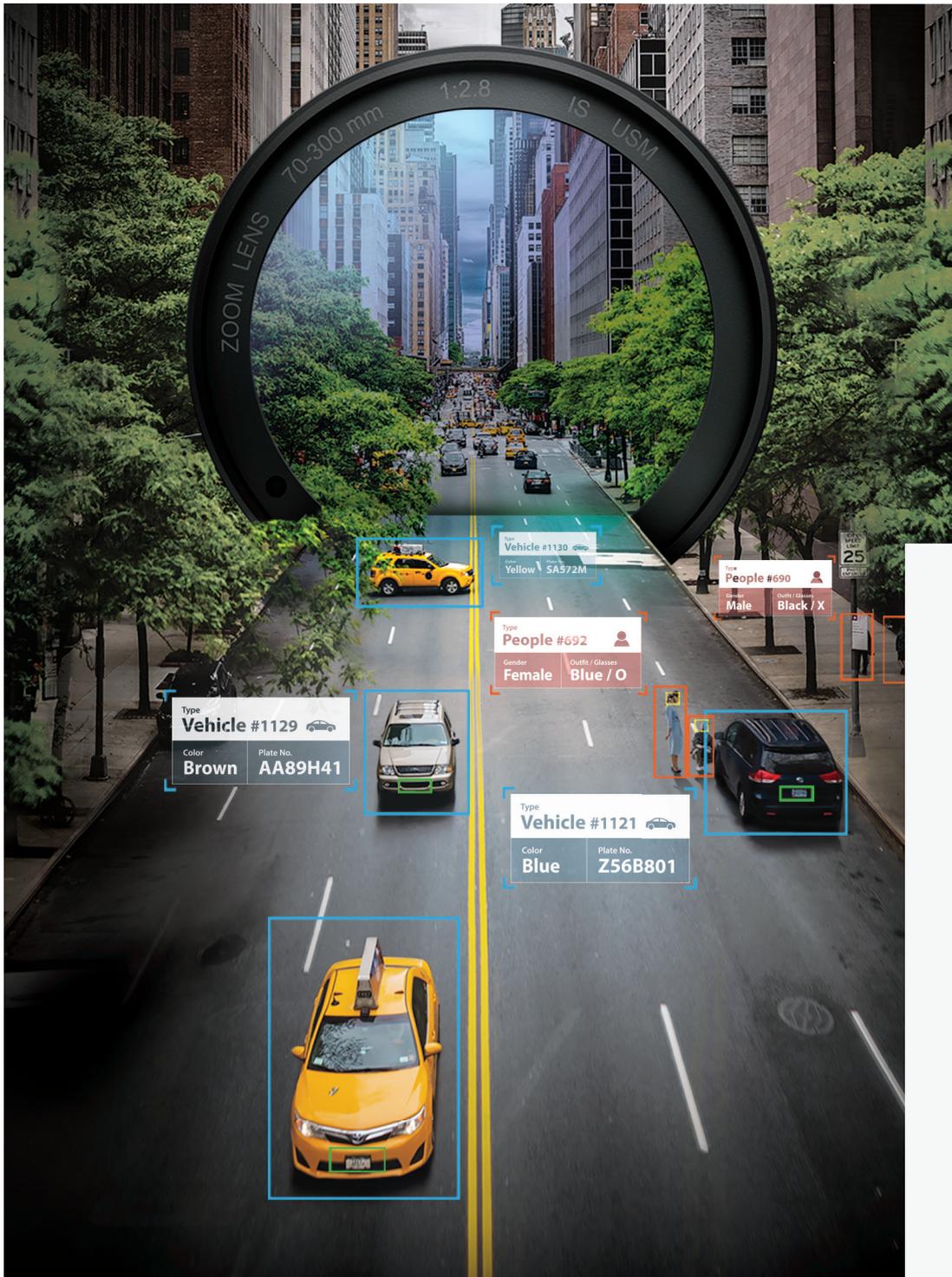
X Core

XNO-C9083R/C8083R/C7083R/C6083R

XNV-C9083R/C8083R/C7083R/C6083R

XND-C9083RV/C8083RV/C7083RV/C6083RV





P series AI Camera & NVR

Precise Object Detection & Classification with AI

Person

Face

Vehicle

License plate

Equipped with a powerful artificial intelligence (AI) engine that detects and classifies people and vehicles in real time, P series AI cameras are designed to accurately capture the unique attributes of objects such as faces and license plates, whilst reducing false alarms caused by waving trees, video noise, and even shadows. It enables operators to quickly and efficiently search for specific events or objects with defined attributes.



AI Camera Series 4K 2MP

PNO-A9081R/A6081R, PNV-A9081R/A6081R, PNM-C34404RQPZ/C32083RVQ, PND-A9081RV/A6081RV

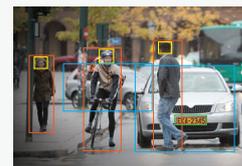


AI NVR Series

PRN-6400DB4/6400B4, PRN-3200B4/3200B2/1600B2

P series AI Cameras

Detect and classify objects real-time



VMS Plug-in for improved AI search

* Person, face, vehicle, license plate

AI Search

Quickly search based on attributes



* AI plug-ins offer seamless integration with VMS from Milestone and Genetec

SolidEDGE

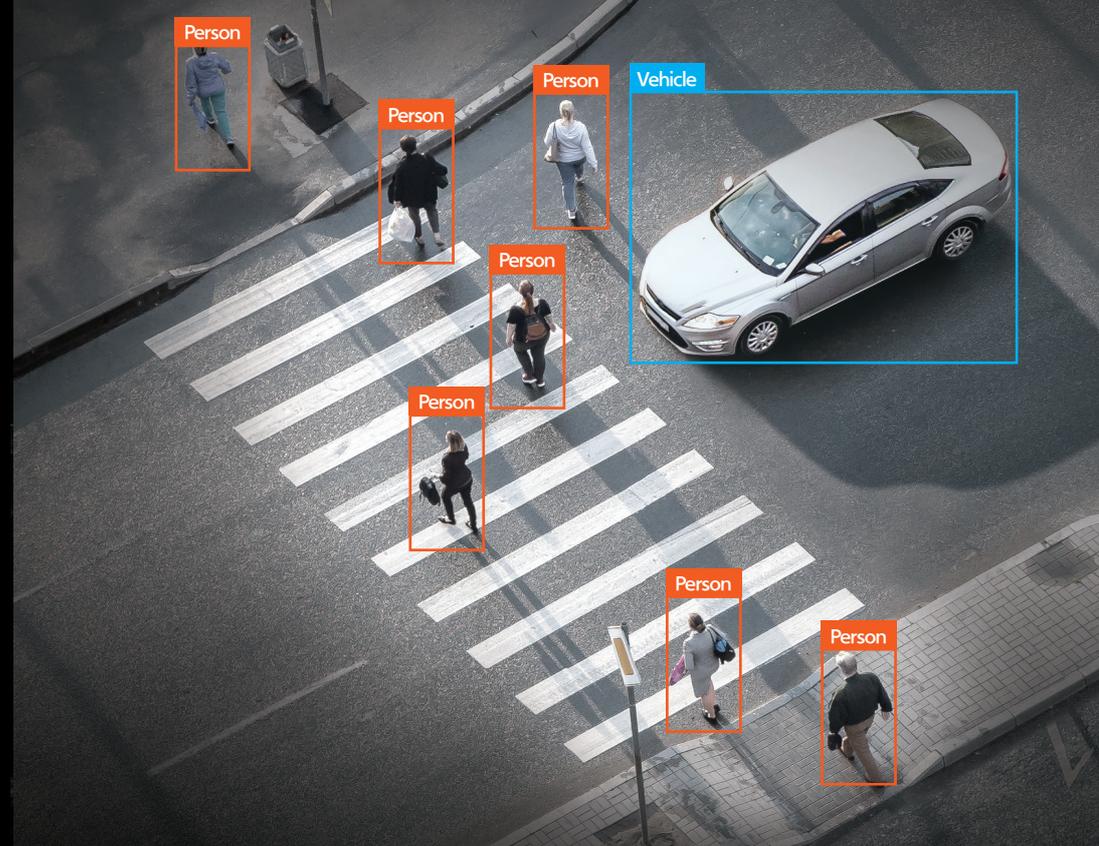
Serverless solution with built-in SSD drive



WAVE sync



The Next Generation
Cloud Management
Security Solution



Meet our **specialized** cameras
equipped with powerful **AI**

Select the best fit camera for your special safety needs



Bi-Spectrum



TNM-C4940TD, C4950TD, C4960TD



Dual Lens



PNM-C12083RVD, C7083RVD



12X Zoom



XNV-6123R, XNO-6123R

X series AI PTZ Plus XNP-C6403R



AI-based object classification and improved auto-tracking function

- Enhanced operational efficiency with AI
- Upgraded object auto tracking performance
- AI based enhanced image quality
 - WiseNR II, Prefer shutter, WiseStream III
- Image quality for night vision (IR 200m)
- Easy installation

Touchless Network Intercom Station TID-600R



Various mounting options for a greater versatility

- Small and slim form factor
- Full duplex two-way communication
- 16.4ft (5m) IR viewable length
- Wide FoV - HFoV 180° , V FoV 114°
- Touchless call
- SIP 2.0 support
- Best-in-class images with 2MP sensor and WDR

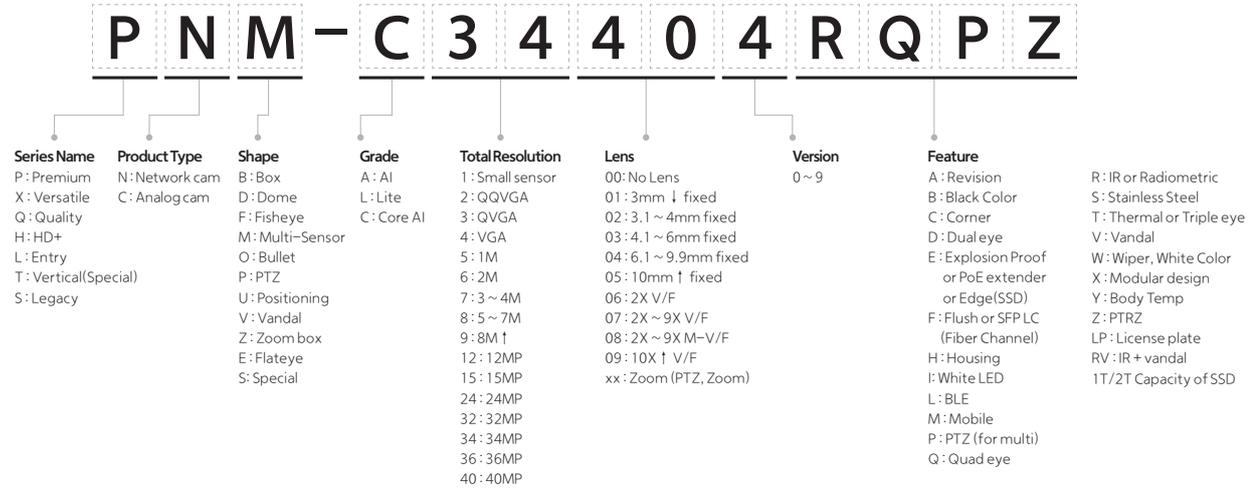


Hanwha Vision is conducting close networking with customers and partners around the world based on global R&D, manufacturing and sales base.

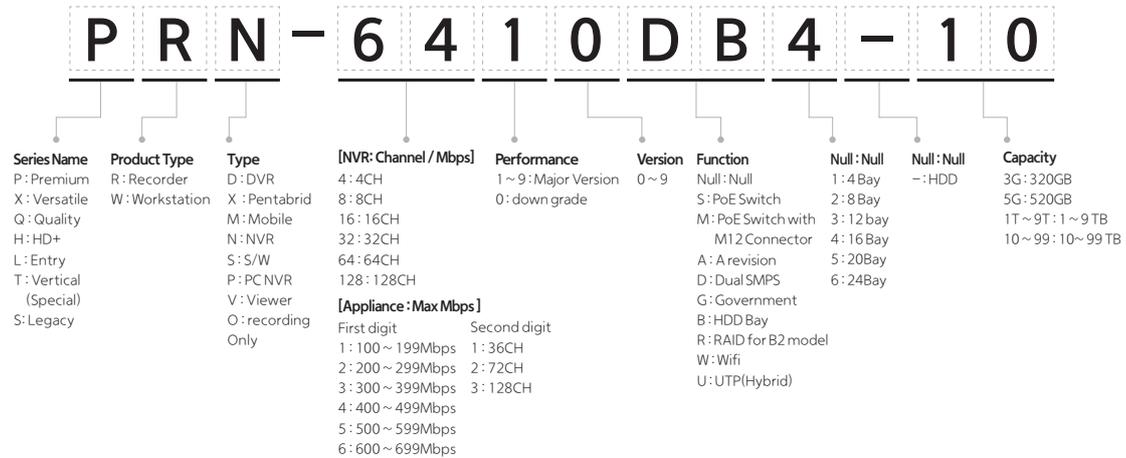


PRODUCT NAMING RULE

Camera

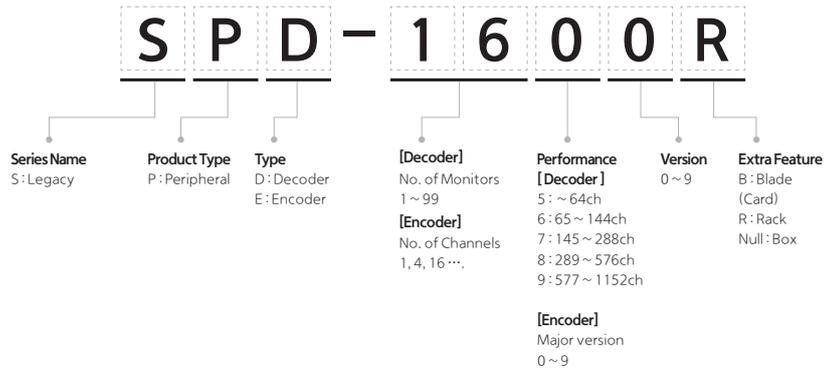


Recorder

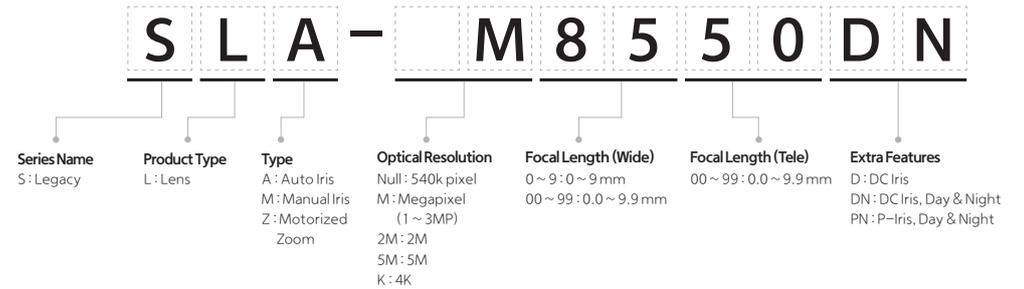


PRODUCT NAMING RULE

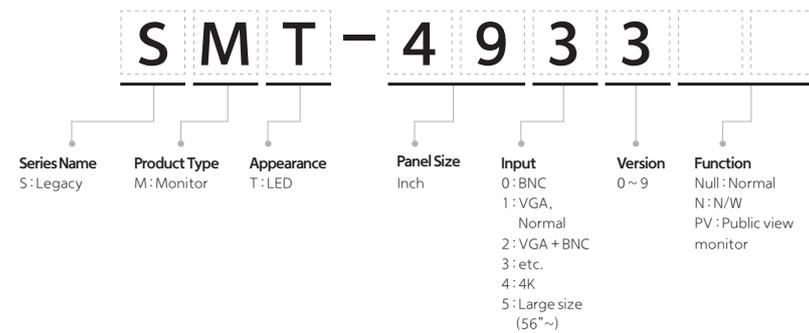
Decoder/Encoder



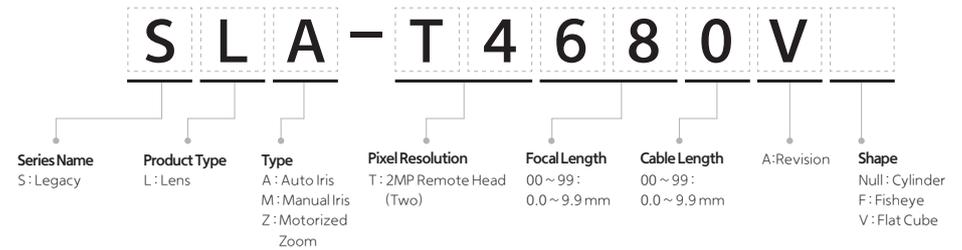
Lens : CS Mount



Monitor



Lens : Remote Head



NETWORK

Camera

AI Cameras

X series

P series

Q series

T series

L series

NVR

Encoder / Decoder

VMS

Access Control

IP Audio Management System

ANALOG

Camera

DVR

PERIPHERAL

Monitor

Controller

Lens

INSTALLATION SOLUTION

Toolbox Plus



X Plus
XNO-9083R
4K AI IR Bullet Camera



X Plus
XNV-9083R
4K AI IR Vandal Dome Camera



X Plus
XNV-9083RZ
4K AI IR PTRZ dome camera



X Plus
XND-9083RV
4K AI IR Dome Camera



X Plus
XNB-9003
4K AI Box Camera

Imaging Device	1/1.8" progressive CMOS	1/1.8" progressive CMOS	1/1.8" progressive CMOS	1/1.8" progressive CMOS	1/1.8" progressive CMOS
Resolution / Max. Frame Rate	8MP / 30fps	8MP / 30fps	8MP / 30fps	8MP / 30fps	8MP / 30fps
Min. Illumination	Color: 0.04Lux (F1.3, 1/30sec) BW: 0Lux (IR LED on)	Color: 0.04Lux (F1.3, 1/30sec, 30IRE) BW: 0Lux (IR LED on)	Color: 0.03Lux (F1.3, 1/30sec, 30IRE) BW: 0.003Lux (F1.3, 1/30sec, 30IRE), 0Lux (IR LED on)	Color: 0.04Lux (F1.3, 1/30sec) BW: 0Lux (IR LED on)	Color: 0.03Lux (F1.2, 1/30sec) BW: 0.003Lux (F1.2, 1/30sec)
Video Output	CVBS: 1.0 Vp-p, Micro USB Type B	CVBS: 1.0 Vp-p, Micro USB Type B	-	CVBS: 1.0 Vp-p, Micro USB Type B	CVBS: 1.0 Vp-p, Micro USB Type B
Focal Length	4.4~9.3mm (2.1x) motorized varifocal	4.4~9.3mm (2.1x) motorized varifocal	4.4~9.3mm (2.1x) motorized varifocal	4.4~9.3mm (2.1x) motorized varifocal	-
Angular Field of View	H: 112.1° (Wide) ~ 47.5° (Tele) V: 58° (Wide) ~ 26.6° (Tele) D: 137.5° (Wide) ~ 54.6° (Tele)	H: 112.1° (Wide) ~ 47.5° (Tele) V: 58° (Wide) ~ 26.6° (Tele) D: 137.5° (Wide) ~ 54.6° (Tele)	H: 113° (Wide) ~ 47° (Tele) V: 58° (Wide) ~ 26° (Tele) D: 138° (Wide) ~ 54° (Tele)	H: 112.1° (Wide) ~ 47.5° (Tele) V: 58° (Wide) ~ 26.6° (Tele) D: 137.5° (Wide) ~ 54.6° (Tele)	-
Pan / Tilt / Rotate	-	0° ~ 360° / -45° ~ 85° / 0° ~ 355°	0° ~ 350° / 0° ~ 85° / 0° ~ 340°	0° ~ 360° / -45° ~ 85° / 0° ~ 355°	-
IR Viewable Length	WiseIR 50m (164.04ft)	WiseIR 50m (164.04ft)	15m (49.21ft) 30m (98.43ft) based on scene	WiseIR 50m (164.04ft)	-
Day & Night	Auto (ICR)	Auto (ICR)	Auto (ICR)	Auto (ICR)	Auto (ICR)
Wide Dynamic Range	extremeWDR (120dB)	extremeWDR (120dB)	extremeWDR (120dB)	extremeWDR (120dB)	extremeWDR (120dB)
Digital Noise Reduction	WiseNR II (Based on AI engine), SSNR V	WiseNR II (Based on AI engine), SSNR V	WiseNR II (Based on AI engine), SSNR V	WiseNR II (Based on AI engine), SSNR V	WiseNR II (Based on AI engine), SSNR V
Digital Image Stabilization	Support (built-in gyro sensor)	Support (built-in gyro sensor)	Support (built-in gyro sensor)	Support (built-in gyro sensor)	Support (built-in gyro sensor)
Analytics	<p>Classified object type: Person/Face/Vehicle/License plate Attributes: Vehicle (Type: car/bus/truck/motorcycle/bicycle) Support DetectionShot Analytics events based on AI engine: Object detection, Virtual line (Crossing/Direction), Virtual area (Loitering/Intrusion/Enter/Exit) Analytics events: Defocus detection, Motion detection, Tampering, Fog detection, Audio detection, Sound classification, Shock detection, Virtual area (Appear/Disappear)</p>				
Business Intelligence	Based on AI engine : People counting, Queue management, Heatmap	Based on AI engine : People counting, Queue management, Heatmap	Based on AI engine: People counting	Based on AI engine : People counting, Queue management, Heatmap	Based on AI engine : People counting, Queue management, Heatmap
Alarm I/O	2 configurable I/O ports, DC 12V output (Max. 50mA)	2 configurable I/O ports, DC 12V output (Max. 50mA)	-	2 configurable I/O ports, DC 12V output (Max. 50mA)	2 configurable I/O ports
Audio I/O	Selectable (mic in/line in) / Line out	Selectable (mic in/line in) / Line out	-	Selectable (mic in/line in/built-in mic) / Line out	Selectable (mic in/line in/built-in mic) / Line out
Video Compression	H.265 / H.264, MJPEG	H.265 / H.264, MJPEG	H.265/H.264, MJPEG	H.265 / H.264, MJPEG	H.265 / H.264, MJPEG
WiseStream	WiseStream II , WiseStream III (Based on AI engine)	WiseStream II , WiseStream III (Based on AI engine)	WiseStream II , WiseStream III (Based on AI engine)	WiseStream II , WiseStream III (Based on AI engine)	WiseStream II , WiseStream III (Based on AI engine)
Streaming	Up to 10 profiles, 3 virtual channel support	Up to 10 profiles, 3 virtual channel support	Up to 10 profiles, 3 virtual channel support	Up to 10 profiles, 3 virtual channel support	Up to 10 profiles, 3 virtual channel support
Edge Storage	micro SD/SDHC/SDXC 2slot Max. 1TB (512GB * 2)	micro SD/SDHC/SDXC 2slot Max. 1TB (512GB * 2)	Micro SD/SDHC/SDXC 2slot Max. 1TB (512GB * 2)	micro SD/SDHC/SDXC 2slot Max. 1TB (512GB * 2)	micro SD/SDHC/SDXC 2slot Max. 1TB (512GB * 2)
Application Programming Interface	ONVIF Profile S/G/T/M SUNAPI (HTTP API) Wisenet open platform	ONVIF Profile S/G/T/M SUNAPI (HTTP API) Wisenet open platform	ONVIF Profile S/G/T/M SUNAPI (HTTP API) Wisenet open platform	ONVIF Profile S/G/T/M SUNAPI (HTTP API) Wisenet open platform	ONVIF Profile S/G/T/M SUNAPI (HTTP API) Wisenet open platform
Operating Temperature	-50°C ~ +60°C (-58°F ~ +140°F) NEMA TS-2: 74°C * Start up should be done at above -30°C 0~95%RH (non-condensing) Humidity control /w GORE vent	-50°C ~ +55°C (-58°F ~ +131°F) * Maximum temperature : +60°C (intermittent) NEMA TS-2: 74°C * Start up should be done at above -30°C 0~95%RH (non-condensing) Humidity control /w GORE vent	-50°C ~ +55°C (-58°F ~ +131°F) +74°C (165°F) (Max) based on NEMA TS-2(2.2.7) * Start up should be done at above -30°C 0~95%RH (non-condensing) Humidity control /w AIR vent	-25°C ~ 50°C (-13°F ~ +122°F) * Maximum temperature : +55°C (intermittent) 0~95%RH (non-condensing) Humidity control /w GORE vent	-10°C ~ 55°C (-14°F ~ +131°F) 0~95%RH (non-condensing)
Certification	IP66/IP67, NEMA4X, IK10	IP66/IP67/IP6K9K, NEMA4X, IK10+	IP66/IP67/IP6K9K, NEMA4X, IK10+	IP52/IK10	-
Power Consumption	PoE+: Max 22.5W, typical 17.9W 12VDC: Max 20W, typical 15.6W Power redundancy failover	PoE+: Max 22.5W, typical 17.9W 12VDC: Max 20W, typical 15.6W Power redundancy failover	PoE+: Max 22.5W, typical 12.1W	PoE+: Max 22.5W, typical 17.9W 12VDC: Max 20W, typical 15.6W Power redundancy failover	PoE: Max 12.95W, typical 9.8W 12VDC: Max 19W, typical 9.5W
Dimensions (WxHxD) / Weight	Ø93.4 x 298.4mm (Ø3.68" x 11.75") 2.2kg (4.85 lb)	Ø180 x 125mm (Ø7.09" x 4.92") 1.9kg (4.19 lb)	Ø180 x 135mm (Ø7.09" x 5.31") 2kg (4.41 lb)	Ø160 x 125mm (Ø6.3" x 4.92") 1.6kg (3.53 lb)	W81 x H67 x D165mm (3.19" x 2.64" x 6.48") 880g (1.94 lb)

NETWORK

ANALOG

PERIPHERAL

ACCESSORY



X Plus

XNV-8093R
6MP AI IR Vandal Dome Camera



X Plus

XND-8093RV
6MP AI IR Dome Camera



X Plus

XNO-8083R
6MP AI IR Bullet Camera



X Plus

XNV-8083R
6MP AI IR Vandal Dome Camera



X Plus

XNV-8083RZ
4K AI IR PTRZ dome camera

Imaging Device	1/1.8" progressive CMOS	1/1.8" progressive CMOS	1/1.8" progressive CMOS	1/1.8" progressive CMOS	1/1.8" progressive CMOS
Resolution / Max. Frame Rate	6MP/30fps	6MP/30fps	6MP/30fps	6MP/30fps	6MP/30fps
Min. Illumination	Color: 0.06Lux (F1.7, 1/30sec) BW: 0Lux (IR LED on)	Color: 0.06Lux (F1.7, 1/30sec, 30IRE) BW: 0Lux (IR LED on)	Color: 0.04Lux (F1.3, 1/30sec) BW: 0Lux (IR LED on)	Color: 0.04Lux (F1.3, 1/30sec, 30IRE) BW: 0Lux (IR LED on)	Color: 0.03Lux (F1.3, 1/30sec, 30IRE) BW: 0.003Lux (F1.3, 1/30sec, 30IRE), 0Lux (IR LED on)
Video Output	CVBS: 1.0 Vp-p, Micro USB Type B	CVBS: 1.0 Vp-p, Micro USB Type B	CVBS: 1.0 Vp-p, Micro USB Type B	CVBS: 1.0 Vp-p, Micro USB Type B	-
Focal Length	10.9~29mm (2.7x) motorized varifocal	10.9~29mm (2.7x) motorized varifocal	4.4~9.3mm (2.1x) motorized varifocal	4.4~9.3mm (2.1x) motorized varifocal	4.4~9.3mm (2.1x) motorized varifocal
Angular Field of View	H: 42° (Wide) ~ 15° (Tele) V: 22.8° (Wide) ~ 8.4° (Tele) D: 48.7° (Wide) ~ 17.1° (Tele)	H: 42° (Wide) ~ 15° (Tele) V: 22.8° (Wide) ~ 8.4° (Tele) D: 48.7° (Wide) ~ 17.1° (Tele)	H: 112.1° (Wide) ~ 47.5° (Tele) V: 58° (Wide) ~ 26.6° (Tele) D: 137.5° (Wide) ~ 54.6° (Tele)	H: 112.1° (Wide) ~ 47.5° (Tele) V: 58° (Wide) ~ 26.6° (Tele) D: 137.5° (Wide) ~ 54.6° (Tele)	H: 113° (Wide) ~ 47° (Tele) V: 58° (Wide) ~ 26° (Tele) D: 138° (Wide) ~ 54° (Tele)
Pan / Tilt / Rotate	0° ~ 360° / -45° ~ 85° / 0° ~ 355°	0° ~ 360° / -45° ~ 85° / 0° ~ 355°	-	0° ~ 360° / -45° ~ 85° / 0° ~ 355°	0° ~ 350° / 0° ~ 85° / 0° ~ 340°
IR Viewable Length	WiseIR 70m (229.66ft)	WiseIR 70m (229.66ft)	WiseIR 50m (164.04ft)	WiseIR 50m (164.04ft)	15m (49.21ft), 30m (98.43ft) based on scene
Day & Night	Auto (ICR)	Auto (ICR)	Auto (ICR)	Auto (ICR)	Auto (ICR)
Wide Dynamic Range	extremeWDR (120dB)	extremeWDR (120dB)	extremeWDR (120dB)	extremeWDR (120dB)	extremeWDR (120dB)
Digital Noise Reduction	WiseNR II (Based on AI engine), SSNR V	WiseNR II (Based on AI engine), SSNR V	WiseNR II (Based on AI engine), SSNR V	WiseNR II (Based on AI engine), SSNR V	WiseNR II (Based on AI engine), SSNR V
Digital Image Stabilization	Support (built-in gyro sensor)	Support (built-in gyro sensor)	Support (built-in gyro sensor)	Support (built-in gyro sensor)	Support (built-in gyro sensor)
Analytics	<p>Classified object type: Person/Face/Vehicle/License plate Attributes: Vehicle (Type: car/bus/truck/motorcycle/bicycle) Support DetectionShot Analytics events based on AI engine: Object detection, Virtual line (Crossing/Direction), Virtual area (Loitering/Intrusion/Enter/Exit) Analytics events: Defocus detection, Motion detection, Tampering, Fog detection, Audio detection, Sound classification, Shock detection, Virtual area (Appear/Disappear)</p>				
Business Intelligence	Based on AI engine : People counting, Queue management, Heatmap	Based on AI engine : People counting, Queue management, Heatmap	Based on AI engine : People counting, Queue management, Heatmap	Based on AI engine : People counting, Queue management, Heatmap	Based on AI engine: People counting
Alarm I/O	2 configurable I/O ports, DC 12V output (Max. 50mA)	2 configurable I/O ports, DC 12V output (Max. 50mA)	2 configurable I/O ports, DC 12V output (Max. 50mA)	2 configurable I/O ports, DC 12V output (Max. 50mA)	-
Audio I/O	Selectable (mic in/line in) / Line out	Selectable (mic in/line in/built-in mic) / Line out	Selectable (mic in/line in) / Line out	Selectable (mic in/line in) / Line out	-
Video Compression	H.265 / H.264, MJPEG	H.265 / H.264, MJPEG	H.265 / H.264, MJPEG	H.265 / H.264, MJPEG	H.265/H.264, MJPEG
WiseStream	WiseStream II, WiseStream III (Based on AI engine)	WiseStream II, WiseStream III (Based on AI engine)	WiseStream II, WiseStream III (Based on AI engine)	WiseStream II, WiseStream III (Based on AI engine)	WiseStream II, WiseStream III (Based on AI engine)
Streaming	Up to 10 profiles, 3 virtual channel support	Up to 10 profiles, 3 virtual channel support	Up to 10 profiles, 3 virtual channel support	Up to 10 profiles, 3 virtual channel support	Up to 10 profiles, 3 virtual channel support
Edge Storage	micro SD/SDHC/SDXC 2slot Max. 1TB (512GB * 2)	micro SD/SDHC/SDXC 2slot Max. 1TB (512GB * 2)	micro SD/SDHC/SDXC 2slot Max. 1TB (512GB * 2)	micro SD/SDHC/SDXC 2slot Max. 1TB (512GB * 2)	Micro SD/SDHC/SDXC 2slot Max. 1TB (512GB * 2)
Application Programming Interface	ONVIF Profile S/G/T/M SUNAPI (HTTP API) Wisenet open platform	ONVIF Profile S/G/T/M SUNAPI (HTTP API) Wisenet open platform	ONVIF Profile S/G/T/M SUNAPI (HTTP API) Wisenet open platform	ONVIF Profile S/G/T/M SUNAPI (HTTP API) Wisenet open platform	ONVIF Profile S/G/T/M SUNAPI (HTTP API) Wisenet open platform
Operating Temperature	-50°C ~ +55°C (-58°F ~ +131°F) * Maximum temperature: +60°C (intermittent) NEMA TS-2: 74°C * Start up should be done at above -30°C 0~95%RH (non-condensing) Humidity control /w GORE vent	-25°C ~ 50°C (-13°F ~ +122°F) * Maximum temperature: +55°C (intermittent) 0~95%RH (non-condensing) Humidity control /w GORE vent	-50°C ~ +60°C (-58°F ~ +140°F) NEMA TS-2: 74°C * Start up should be done at above -30°C 0~95%RH (non-condensing) Humidity control /w GORE vent	-50°C ~ +55°C (-58°F ~ +131°F) * Maximum temperature: +60°C (intermittent) NEMA TS-2: 74°C * Start up should be done at above -30°C 0~95%RH (non-condensing) Humidity control /w GORE vent	-50°C ~ +55°C (-58°F ~ +131°F) +74°C (165°F) (Max) based on NEMA TS-2 (2.2.7) * Start up should be done at above -30°C 0~95%RH (non-condensing) Humidity control /w AIR vent
Certification	IP66/IP67/IP6K9K, NEMA4X, IK 10+	IP52/IK 10	IP66/IP67, NEMA4X, IK 10	IP66/IP67/IP6K9K, NEMA4X, IK 10+	IP66/IP67/IP6K9K, NEMA4X, IK 10+
Power Consumption	PoE+: Max 22.5W, typical 17.9W 12VDC: Max 20W, typical 15.6W Power redundancy failover	PoE+: Max 22.5W, typical 17.9W 12VDC: Max 20W, typical 15.6W Power redundancy failover	PoE+: Max 22.5W, typical 17.9W 12VDC: Max 20W, typical 15.6W Power redundancy failover	PoE+: Max 22.5W, typical 17.9W 12VDC: Max 20W, typical 15.6W Power redundancy failover	PoE+: Max 22.5W, typical 12.1W
Dimensions (WxHxD) / Weight	Ø180 x 125mm (7.09" x 4.92") 1.9kg (4.19 lb)	Ø160 x 125mm (Ø6.3" x 4.92") 1.6kg (3.53 lb)	Ø93.4 x 298.4mm (Ø3.68" x 11.75") 2.2kg (4.85 lb)	Ø180 x 125mm (Ø7.09" x 4.92") 1.9kg (4.19 lb)	Ø180 x 135mm (Ø7.09" x 5.31") 2kg (4.41 lb)

NETWORK

ANALOG

PERIPHERAL

ACCESSORY

X Plus



XNV-8083Z
4K AI IR PTRZ dome camera

X Plus



XND-8083RV
6MP AI IR Dome Camera

X Plus



XNB-8003
6MP AI Box Camera

X Plus



XNO-6123R
2MP AI IR Bullet Camera

X Plus



XNO-6083R
2MP AI IR Bullet Camera

Imaging Device	1/1.8" progressive CMOS	1/1.8" progressive CMOS	1/1.8" progressive CMOS	1/2.8" CMOS	1/2.8" progressive CMOS
Resolution / Max. Frame Rate	6MP/30fps	6MP/30fps	6MP/30fps	2MP / 120fps	2MP/120fps
Min. Illumination	Color: 0.03Lux (F1.3, 1/30sec, 30IRE) BW: 0.003Lux (F1.3, 1/30sec, 30IRE)	Color: 0.04Lux (F1.3, 1/30sec, 30IRE) BW: 0Lux (IR LED on)	Color: 0.03Lux (F1.2, 1/30sec, 30IRE) BW: 0.003Lux (F1.2, 1/30sec, 30IRE)	Color: 0.03Lux (F1.6, 1/30sec, 30IRE) B/W: 0Lux (IR LED on), 30/25fps	Color: 0.01Lux (F1.4, 1/30sec, 30IRE) B/W: 0Lux (IR LED on), 30/25fps
Video Output	-	CVBS: 1.0 Vp-p, Micro USB Type B	CVBS: 1.0 Vp-p, Micro USB Type B	CVBS: 1.0 Vp-p, Micro USB type B	CVBS: 1.0 Vp-p, Micro USB Type B
Focal Length	4.4~9.3mm(2.1x) motorized varifocal	4.4~9.3mm (2.1x) motorized varifocal	-	5.2~62.4mm (12x) zoom	2.8~12mm (4.3x) motorized varifocal
Angular Field of View	H: 113° (Wide)~47° (Tele) V: 58° (Wide)~26° (Tele) D: 138° (Wide)~54° (Tele)	H: 112.1° (Wide)~47.5° (Tele) V: 58° (Wide)~26.6° (Tele) D: 137.5° (Wide)~54.6° (Tele)	-	H: 55° (Wide)~5° (Tele) V: 35° (Wide)~3° (Tele) D: 62° (Wide)~6° (Tele)	H: 119.5° (Wide)~27.9° (Tele) V: 62.8° (Wide)~15.7° (Tele) D: 142.1° (Wide)~32° (Tele)
Pan / Tilt / Rotate	0° ~350° / 0° ~85° / 0° ~340°	0° ~360° / -45° ~85° / 0° ~355°	-	-	-
IR Viewable Length	-	WiselR 50m (164.04ft)	-	WiselR 90m (295.28ft)	WiselR 50m (164.04ft)
Day & Night	Auto (ICR)	Auto (ICR)	Auto (ICR)	Auto (ICR)	Auto (ICR)
Wide Dynamic Range	extremeWDR (120dB)	extremeWDR (120dB)	extremeWDR (120dB)	extremeWDR (150dB)	extremeWDR (150dB)
Digital Noise Reduction	WiseNR II (Based on AI engine), SSNR V	WiseNR II (Based on AI engine), SSNR V	WiseNR II (Based on AI engine), SSNR V	WiseNR II (Based on AI engine), SSNR V	WiseNR II (Based on AI engine), SSNR V
Digital Image Stabilization	Support (built-in gyro sensor)	Support (built-in gyro sensor)	Support (built-in gyro sensor)	Support (built-in gyro sensor)	Support (built-in gyro sensor)
Analytics	<p>Classified object type: Person/Face/Vehicle/License plate Attributes: Vehicle (Type:car/bus/truck/motorcycle/bicycle) Support DetectionShot Analytics events based on AI engine: Object detection, Virtual line (Crossing/Direction), Virtual area (Loitering/Intrusion/Enter/Exit) Analytics events: Defocus detection, Motion detection, Tampering, Fog detection, Audio detection, Sound classification, Shock detection, Virtual area (Appear/Disappear)</p>				
Business Intelligence	-	Based on AI engine : People counting, Queue management, Heatmap	Based on AI engine : People counting, Queue management, Heatmap	-	Based on AI engine : People counting, Queue management, Heatmap
Alarm I/O	-	2 configurable I/O ports, DC 12V output (Max. 50mA)	2 configurable I/O ports	2 configurable I/O ports, DC 12V output (Max. 50mA)	2 configurable I/O ports, DC 12V output (Max. 50mA)
Audio I/O	-	Selectable (mic in/line in/built-in mic) / Line out	Selectable (mic in/line in/built-in mic) / Line out	Selectable (mic in/line in) / Line out	Selectable (mic in/line in) / Line out
Video Compression	H.265/H.264, MJPEG	H.265 / H.264, MJPEG	H.265 / H.264, MJPEG	H.265 / H.264, MJPEG	H.265 / H.264, MJPEG
WiseStream	WiseStream II , WiseStream III (Based on AI engine)	WiseStream II , WiseStream III (Based on AI engine)	WiseStream II , WiseStream III (Based on AI engine)	WiseStream II , WiseStream III (Based on AI engine)	WiseStream II , WiseStream III (Based on AI engine)
Streaming	Up to 10 profiles, 3 virtual channel support	Up to 10 profiles, 3 virtual channel support	Up to 10 profiles, 3 virtual channel support	Up to 10 profiles	Up to 10 profiles, 3 virtual channel support
Edge Storage	Micro SD/SDHC/SDXC 2slot Max. 1TB (512GB * 2)	micro SD/SDHC/SDXC 2slot Max. 1TB (512GB * 2)	micro SD/SDHC/SDXC 2slot Max. 1TB (512GB * 2)	micro SD/SDHC/SDXC 2slot Max. 1TB (512GB * 2)	micro SD/SDHC/SDXC 2slot Max. 1TB (512GB * 2)
Application Programming Interface	ONVIF Profile S/G/T/M SUNAPI (HTTP API) Wisenet open platform	ONVIF Profile S/G/T/M SUNAPI (HTTP API) Wisenet open platform	ONVIF Profile S/G/T/M SUNAPI (HTTP API) Wisenet open platform	ONVIF Profile S/G/T/M SUNAPI (HTTP API) Wisenet open platform	ONVIF Profile S/G/T/M SUNAPI (HTTP API) Wisenet open platform
Operating Temperature	-50°C ~ +55°C (-58°F ~ +131°F) +74°C (165°F) (Max) based on NEMA TS-2 (2.2.7) * Start up should be done at above -30°C 0~95%RH (non-condensing) Humidity control /w AIR vent	-25°C ~ 50°C (-13°F ~ +122°F) * Maximum temperature : +55°C (intermittent) 0~95%RH (non-condensing) Humidity control /w GORE vent	-10°C ~ 55°C (-14°F ~ +131°F) 0~95%RH (non-condensing)	-40°C ~ +60°C (-40°F ~ +140°F) / 0~95% RH (Non-condensing) * Start up should be done at above -30°C Maximum Temperature based on NEMA-TS 2 (2.2.7) : +74°C (+165°F) Humidity control /w GORE vent	-50°C ~ +60°C (-58°F ~ +140°F) NEMA TS-2 : 74°C * Start up should be done at above -30°C 0~95%RH (non-condensing) Humidity control /w GORE vent
Certification	IP66/IP67/IP6K9K, NEMA4X, IK 10+	IP52/IK 10	-	IP66/67, IK10, NEMA4X, NEMA-TS 2 (2.2.8, 2.2.9)	IP66/IP67, NEMA4X, IK 10
Power Consumption	PoE+: Max 17.0W, typical 12.1W	PoE+: Max 22.5W, typical 17.9W 12VDC: Max 20W, typical 15.6W Power redundancy failover	PoE: Max 12.95W, typical 9.8W 12VDC: Max 19W, typical 9.5W	PoE+: Max 19.5W, typical 15.5W 12VDC: Max 16.5W, typical 13.1W Power redundancy failover	PoE+: Max 22.5W, typical 17.9W 12VDC: Max 20W, typical 15.6W Power redundancy failover
Dimensions (WxHxD) / Weight	Ø180 x 135mm (Ø7.09" x 5.31") 2kg (4.41 lb)	Ø160 x 125mm (Ø6.3" x 4.92") 1.6kg (3.53 lb)	W 81 x H 67 x D 165mm (Ø3.19" x 2.64" x 6.48") 880g (1.94 lb)	Ø93.4 x 298.4mm (Ø3.68" x 11.75") 2.3kg (5.07 lb)	Ø93.4 x 298.4mm (Ø3.68" x 11.75") 2.2kg (4.85 lb)

NETWORK

ANALOG

PERIPHERAL

ACCESSORY

X Plus



XNV-6123R
2MP AI IR Vandal Dome Camera



XNV-6083RZ
2MP AI IR Vandal Dome Camera

X Plus



XNV-6083R
2MP AI IR Vandal Dome Camera



XNV-6083Z
2MP AI Vandal Dome Camera

X Plus



XND-6083RV
2MP AI IR Dome Camera

Imaging Device	1/2.8" CMOS	1/2.8" progressive CMOS	1/2.8" progressive CMOS*	1/2.8" progressive CMOS	1/2.8" progressive CMOS
Resolution / Max. Frame Rate	2MP / 120fps	2MP / 120fps	2MP / 120fps	2MP / 120fps	2MP / 120fps
Min. Illumination	Color: 0.03Lux (F1.6, 1/30sec, 30IRE) B/W: 0Lux (IR LED on), 30/25fps	Color: 0.01Lux (F1.4, 1/30sec, 30IRE) BW: 0.001Lux (F1.4, 1/30sec, 30IRE), 0Lux (IR LED on), 30/25fps	Color: 0.01Lux (F1.4, 1/30sec, 30IRE) B/W: 0Lux (IR LED on), 30/25fps	Color: 0.01Lux (F1.4, 1/30sec, 30IRE) BW: 0.001Lux (F1.4, 1/30sec, 30IRE), 30/25fps	Color: 0.01Lux (F1.4, 1/30sec, 30IRE) B/W: 0Lux (IR LED on), 30/25fps
Video Output	CVBS: 1.0 Vp-p, Micro USB type B	-	CVBS: 1.0 Vp-p, Micro USB Type B	-	CVBS: 1.0 Vp-p, Micro USB Type B
Focal Length	5.2~62.4mm (12x) zoom	2.8~12mm (4.3x) motorized varifocal	2.8~12mm (4.3x) motorized varifocal	2.8~12mm (4.3x) motorized varifocal	2.8~12mm (4.3x) motorized varifocal
Angular Field of View	H: 55° (Wide)~5° (Tele) V: 33° (Wide)~3° (Tele) D: 62° (Wide)~6° (Tele)	H: 120° (Wide)~27° (Tele) V: 63° (Wide)~15° (Tele) D: 143° (Wide)~32° (Tele)	H: 119.5° (Wide)~27.9° (Tele) V: 62.8° (Wide)~15.7° (Tele) D: 142.1° (Wide)~32° (Tele)	H: 120° (Wide)~27° (Tele) V: 63° (Wide)~15° (Tele) D: 143° (Wide)~32° (Tele)	H: 119.5° (Wide)~27.9° (Tele) V: 62.8° (Wide)~15.7° (Tele) D: 142.1° (Wide)~32° (Tele)
Pan / Tilt / Rotate	0°~360° / -45°~80° / 0°~355°	0°~350° / 0°~85° / 0°~340°	0°~360° / -45°~80° / 0°~355°	0°~350° / 0°~85° / 0°~340°	0°~360° / -45°~85° / 0°~355°
IR Viewable Length	WiseIR 90m (295.28ft)	15m (42.91ft)	WiseIR 50m (164.04ft)	-	WiseIR 50m (164.04ft)
Day & Night	Auto (ICR)	Auto (ICR)	Auto (ICR)	Auto (ICR)	Auto (ICR)
Wide Dynamic Range	extremeWDR (150dB)	"	extremeWDR (150dB)*	extremeWDR (150dB)	extremeWDR (150dB)
Digital Noise Reduction	WiseNR II (Based on AI engine), SSNR V	WiseNR II (Based on AI engine), SSNR V	WiseNR II (Based on AI engine), SSNR V	WiseNR II (Based on AI engine), SSNR V	WiseNR II (Based on AI engine), SSNR V
Digital Image Stabilization	Support (built-in gyro sensor)	Support	Support (built-in gyro sensor)	Support	Support (built-in gyro sensor)
Analytics	<p>Classified object type: Person/Face/Vehicle/License plate Attributes: Vehicle (Type: car/bus/truck/motorcycle/bicycle) Support DetectionShot Analytics events based on AI engine: Object detection, Virtual line (Crossing/Direction), Virtual area (Loitering/Intrusion/Enter/Exit) Analytics events: Defocus detection, Motion detection, Tampering, Fog detection, Audio detection, Sound classification, Shock detection, Virtual area (Appear/Disappear)</p>				
Business Intelligence	-	Based on AI engine: People counting	Based on AI engine: People counting, Queue management, Heatmap	Based on AI engine: People counting	Based on AI engine: People counting, Queue management, Heatmap
Alarm I/O	2 configurable I/O ports, DC 12V output (Max. 50mA)	-	2 configurable I/O ports, DC 12V output (Max. 50mA)	-	2 configurable I/O ports, DC 12V output (Max. 50mA)
Audio I/O	Selectable (mic in/line in) / Line out	-	Selectable (mic in/line in) / Line out	-	Selectable (mic in/line in/built-in mic) / Line out
Video Compression	H.265 / H.264, MJPEG	H.265/H.264, MJPEG	H.265 / H.264, MJPEG	H.265/H.264, MJPEG	H.265 / H.264, MJPEG
WiseStream	WiseStream II, WiseStream III (Based on AI engine)	WiseStream II, WiseStream III (Based on AI engine)	WiseStream II, WiseStream III (Based on AI engine)	WiseStream II, WiseStream III (Based on AI engine)	WiseStream II, WiseStream III (Based on AI engine)
Streaming	Up to 10 profiles	Up to 10 profiles	Up to 10 profiles, 3 virtual channel support	Up to 10 profiles	Up to 10 profiles, 3 virtual channel support
Edge Storage	micro SD/SDHC/SDXC 2slot Max. 1TB (512GB * 2)	Micro SD/SDHC/SDXC 2slot 1TB	micro SD/SDHC/SDXC 2slot Max. 1TB (512GB * 2)	Micro SD/SDHC/SDXC 2slot 1TB	micro SD/SDHC/SDXC 2slot Max. 1TB (512GB * 2)
Application Programming Interface	ONVIF Profile S/G/T/M SUNAPI (HTTP API) Wisenet open platform	ONVIF Profile S/G/T/M SUNAPI (HTTP API)	ONVIF Profile S/G/T/M SUNAPI (HTTP API) Wisenet open platform	ONVIF Profile S/G/T/M SUNAPI (HTTP API)	ONVIF Profile S/G/T/M SUNAPI (HTTP API) Wisenet open platform
Operating Temperature	-40°C ~ +60°C (-40°F ~ +140°F) / 0~95%RH (Non-condensing) * Start up should be done at above -30°C NEMA-TS 2 (2.2.7) : +74°C (+165°F) Humidity control /w GORE vent	-50°C ~ +55°C (-58°F ~ +131°F) * Start up should be done at above -30°C 0~95%RH (non-condensing)	-50°C ~ +55°C (-58°F ~ +131°F) * Maximum temperature: +60°C (intermittent) NEMA TS-2: 74°C * Start up should be done at above -30°C 0~95%RH (non-condensing) Humidity control /w GORE vent	-50°C ~ +55°C (-58°F ~ +131°F) * Start up should be done at above -30°C 0~95%RH (non-condensing)	-25°C ~ 50°C (-13°F ~ +122°F) * Maximum temperature: +55°C (intermittent) 0~95%RH (non-condensing) Humidity control /w GORE vent
Certification	IP66/IP67/IP6K9K, NEMA4X, NEMA-TS 2 (2.2.8, 2.2.9), IK10+	IP66/IP67/IP6K9K, NEMA4X, IK10+	IP66/IP67/IP6K9K, NEMA4X, IK10+	IP66/IP67/IP6K9K, NEMA4X, IK10+	IP52, IK10
Power Consumption	PoE+: Max 19.5W, typical 15.5W 12VDC: Max 16.5W, typical 13.1W Power redundancy failover	PoE+: Max 22.5W, typical 11.0W	PoE+: Max 22.5W, typical 11.0W*	PoE+: Max 17.0W, typical 11.0W	PoE+: Max 17.0W, typical 11.0W
Dimensions (WxHxD) / Weight	Ø180 x 138mm (Ø7.09" x 5.43") 2.13kg (4.70 lb)	Ø180 x 135mm (Ø7.09 x 5.31") 2000g (4.41 lb)	Ø180 x 125mm (Ø7.09 x 4.92") 1.9kg (4.19 lb)	Ø180 x 135mm (Ø7.09 x 5.31"), 2000g (4.41 lb)	Ø180 x 135mm (Ø7.09 x 5.31"), 2000g (4.41 lb)

X Plus



XNB-6003
2MP AI Box Camera

X Core



XNO-C9083R
4K AI IR Bullet Camera

X Core



XNV-C9083R
4K AI IR Vandal Dome Camera

X Core



XND-C9083RV
4K AI IR Dome Camera

X Core



XNO-C8083R
6MP AI IR Bullet Camera

Imaging Device	1/2.8" progressive CMOS	1/1.8" progressive CMOS	1/1.8" progressive CMOS	1/1.8" progressive CMOS	1/1.8" progressive CMOS
Resolution / Max. Frame Rate	2MP / 120fps	8MP / 30fps	8MP / 30fps	8MP / 30fps	6MP / 30fps
Min. Illumination	Color: 0.007Lux (F1.2, 1/30sec, 30IRE) B/W: 0.0007Lux (F1.2, 1/30sec, 30IRE), 30/25fps	Color: 0.04Lux (F1.3, 1/30sec, 30IRE) BW: 0Lux (IR LED on)	Color: 0.04Lux (F1.3, 1/30sec) BW: 0Lux (IR LED on)	Color: 0.04Lux (F1.3, 1/30sec, 30IRE) BW: 0Lux (IR LED on)	Color: 0.04Lux (F1.3, 1/30sec, 30IRE) B/W: 0Lux (IR LED on)
Video Output	CVBS: 1.0 Vp-p, Micro USB Type B	Micro USB Type B	Micro USB Type B	Micro USB Type B	Micro USB Type B
Focal Length	-	4.4 ~ 9.3mm (2.1x) motorized varifocal	4.4 ~ 9.3mm (2.1x) motorized varifocal	4.4 ~ 9.3mm (2.1x) motorized varifocal	4.4 ~ 9.3mm (2.1x) motorized varifocal
Angular Field of View	-	H: 112.1° (Wide) ~ 47.5° (Tele) V: 58° (Wide) ~ 26.6° (Tele) D: 137.5° (Wide) ~ 54.6° (Tele)	H: 112.1° (Wide) ~ 47.5° (Tele) V: 58° (Wide) ~ 26.6° (Tele) D: 137.5° (Wide) ~ 54.6° (Tele)	H: 112.1° (Wide) ~ 47.5° (Tele) V: 58° (Wide) ~ 26.6° (Tele) D: 137.5° (Wide) ~ 54.6° (Tele)	H: 112.1° (Wide) ~ 47.5° (Tele) V: 58° (Wide) ~ 26.6° (Tele) D: 137.5° (Wide) ~ 54.6° (Tele)
Pan / Tilt / Rotate	-	-	0° ~ 360° / -45° ~ 75° / 0° ~ 355°	0° ~ 360° / -45° ~ 75° / 0° ~ 355°	-
IR Viewable Length	-	WiseIR 40m (131.23ft)	WiseIR 40m (131.23ft)	WiseIR 40m (131.23ft)	WiseIR 40m (131.23ft)
Day & Night	Auto (ICR)	Auto (ICR)	Auto (ICR)	Auto (ICR)	Auto (ICR)
Wide Dynamic Range	extremeWDR (150dB)	extremeWDR (120dB)	extremeWDR (120dB)	extremeWDR (120dB)	extremeWDR (120dB)
Digital Noise Reduction	WiseNR II (Based on AI engine), SSNR V	WiseNR II (Based on AI engine), SSNR V	WiseNR II (Based on AI engine), SSNR V	WiseNR II (Based on AI engine), SSNR V	WiseNR II (Based on AI engine), SSNR V
Digital Image Stabilization	Support (built-in gyro sensor)	Support (built-in gyro sensor)	Support (built-in gyro sensor)	Support (built-in gyro sensor)	Support (built-in gyro sensor)
Analytics	<p>Classified object type: Person/Face/Vehicle/License plate Attributes: Vehicle (Type: car/bus/truck/motorcycle/bicycle) Support DetectionShot Analytics events based on AI engine: Object detection, Virtual line (Crossing/Direction), Virtual area (Loitering/Intrusion/Enter/Exit) Analytics events: Defocus detection, Motion detection, Tampering, Fog detection, Audio detection, Sound classification, Shock detection, Virtual area (Appear/Disappear)</p>				
Business Intelligence	Based on AI engine : People counting, Queue management, Heatmap	Based on AI engine : People counting, Queue management, Heatmap	Based on AI engine : People counting, Queue management, Heatmap	Based on AI engine : People counting, Queue management, Heatmap	Based on AI engine : People counting, Queue management, Heatmap
Alarm I/O	2 configurable I/O ports	2 configurable I/O ports	2 configurable I/O ports	2 configurable I/O ports	2 configurable I/O ports
Audio I/O	Selectable (mic in/line in/built-in mic) / Line out	Selectable (mic in/line in) / Line out	Selectable (mic in/line in) / Line out	Selectable (mic in/line in) / Line out	Selectable (mic in/line in) / Line out
Video Compression	H.265 / H.264, MJPEG	H.265 / H.264, MJPEG	H.265 / H.264, MJPEG	H.265 / H.264, MJPEG	H.265 / H.264, MJPEG
WiseStream	WiseStream II , WiseStream III (Based on AI engine)	WiseStream II , WiseStream III (Based on AI engine)	WiseStream II , WiseStream III (Based on AI engine)	WiseStream II , WiseStream III (Based on AI engine)	WiseStream II , WiseStream III (Based on AI engine)
Streaming	Up to 10 profiles, 3 virtual channel support	Up to 10 profiles, 3 virtual channel support	Up to 10 profiles, 3 virtual channel support	Up to 10 profiles, 3 virtual channel support	Up to 10 profiles, 3 virtual channel support
Edge Storage	micro SD/SDHC/SDXC 2slot Max. 1TB (512GB * 2)	micro SD/SDHC/SDXC 1slot 512GB	micro SD/SDHC/SDXC 1slot 512GB	micro SD/SDHC/SDXC 1slot 512GB	micro SD/SDHC/SDXC 1slot 512GB
Application Programming Interface	ONVIF Profile S/G/T/M SUNAPI (HTTP API) Wisenet open platform	ONVIF Profile S/G/T/M SUNAPI (HTTP API) Wisenet open platform	ONVIF Profile S/G/T/M SUNAPI (HTTP API) Wisenet open platform	ONVIF Profile S/G/T/M SUNAPI (HTTP API) Wisenet open platform	ONVIF Profile S/G/T/M SUNAPI (HTTP API) Wisenet open platform
Operating Temperature	-10°C ~ 55°C (-14°F ~ +131°F) 0~95%RH (non-condensing)	-40°C ~ +55°C (-40°F ~ +131°F) * Maximum temperature : +60°C (intermittent) * Start up should be done at above -20°C NEMA TS-2 : 74°C 0~95%RH (non-condensing) Humidity control /w GORE vent	-40°C ~ +55°C (-40°F ~ +131°F) * Maximum temperature : +60°C (intermittent) * Start up should be done at above -20°C NEMA TS-2 : 74°C 0~95%RH (non-condensing) Humidity control /w GORE vent	-10°C ~ 50°C (14°F ~ +122°F) * Maximum temperature : +55°C (intermittent) 0~95%RH (non-condensing) Humidity control /w GORE vent	-40°C ~ +55°C (-40°F ~ +131°F) * Maximum temperature : +60°C (intermittent) * Start up should be done at above -20°C NEMA TS-2 : 74°C 0~95%RH (non-condensing) Humidity control /w GORE vent
Certification	-	IP66/IP67/NEMA4X, IK10	IP66/IP67/NEMA4X, IK10	IP52, IK08	IP66/IP67/NEMA4X, IK10
Power Consumption	PoE: Max 12.95W, typical 9.8W 12VDC: Max 19W, typical 9.5W	PoE: Max 12.95W, typical 11.2W 12VDC: Max 13.2W, typical 10.8W	PoE: Max 12.95W, typical 11.2W 12VDC: Max 13.2W, typical 10.8W	PoE: Max 12.95W, typical 11.2W 12VDC: Max 13.2W, typical 10.8W	PoE: Max 12.95W, typical 11.2W 12VDC: Max 13.2W, typical 10.8W
Dimensions (WxHxD) / Weight	W81 x H67 x D 165mm (3.19" x 2.64" x 6.48") 880g (1.94 lb)	Ø93.4 x 276.6mm (Ø3.68" x 10.89") 1.64kg (3.62 lb)	Ø160 x 118mm (Ø6.3" x 4.65") 1.45kg (3.2lb)	Ø160 x 118mm (Ø6.3" x 4.65") 1.35kg (2.98 lb)	Ø93.4 x 276.6mm (Ø3.68" x 10.89") 1.64kg (3.62 lb)

NETWORK

ANALOG

PERIPHERAL

ACCESSORY

X Core



XNV-C8083R
6MP AI IR Vandal Dome Camera

X Core



XND-C8083RV
6MP AI Dome Camera

X Core



XNO-C7083R
4MP AI IR Bullet Camera

X Core



XNV-C7083R
4MP AI IR Vandal Dome Camera

X Core



XND-C7083RV
4MP AI IR Dome Camera

Imaging Device	1/1.8" progressive CMOS	1/1.8" progressive CMOS	1/2.8" progressive CMOS	1/2.8" progressive CMOS	1/2.8" progressive CMOS
Resolution / Max. Frame Rate	6MP / 30fps	6MP / 30fps	4MP / 60fps	4MP / 60fps	4MP / 60fps
Min. Illumination	Color: 0.04Lux (F1.3, 1/30sec, 30IRE) B/W: 0Lux (IR LED on)	Color: 0.04Lux (F1.3, 1/30sec, 30IRE) B/W: 0Lux (IR LED on)	Color: 0.038Lux (F1.4, 1/30sec, 30IRE) B/W: 0Lux (IR LED on)	Color: 0.038Lux (F1.4, 1/30sec, 30IRE) B/W: 0Lux (IR LED on)	Color: 0.038Lux (F1.4, 1/30sec, 30IRE) B/W: 0Lux (IR LED on)
Video Output	Micro USB Type B	Micro USB Type B	Micro USB Type B	Micro USB Type B	Micro USB Type B
Focal Length	4.4 ~ 9.3mm (2.1x) motorized varifocal	4.4 ~ 9.3mm (2.1x) motorized varifocal	2.8 ~ 10mm (3.6x) motorized varifocal	2.8 ~ 10mm (3.6x) motorized varifocal	2.8 ~ 10mm (3.6x) motorized varifocal
Angular Field of View	H: 112.1° (Wide) ~ 47.5° (Tele) V: 58° (Wide) ~ 26.6° (Tele) D: 137.5° (Wide) ~ 54.6° (Tele)	H: 112.1° (Wide) ~ 47.5° (Tele) V: 58° (Wide) ~ 26.6° (Tele) D: 137.5° (Wide) ~ 54.6° (Tele)	H: 109.7° (Wide) ~ 30.4° (Tele) V: 60.8° (Wide) ~ 17.8° (Tele) D: 131.3° (Wide) ~ 35.3° (Tele)	H: 109.7° (Wide) ~ 30.4° (Tele) V: 60.8° (Wide) ~ 17.8° (Tele) D: 131.3° (Wide) ~ 35.3° (Tele)	H: 109.7° (Wide) ~ 30.4° (Tele) V: 60.8° (Wide) ~ 17.8° (Tele) D: 131.3° (Wide) ~ 35.3° (Tele)
Pan / Tilt / Rotate	0° ~ 360° / -45° ~ 75° / 0° ~ 355°	0° ~ 360° / -45° ~ 75° / 0° ~ 355°	-	0° ~ 360° / -45° ~ 75° / 0° ~ 355°	0° ~ 360° / -45° ~ 75° / 0° ~ 355°
IR Viewable Length	WiseIR 40m (131.23ft)	WiseIR 40m (131.23ft)	WiseIR 40m (131.23ft)	WiseIR 40m (131.23ft)	WiseIR 40m (131.23ft)
Day & Night	Auto (ICR)	Auto (ICR)	Auto (ICR)	Auto (ICR)	Auto (ICR)
Wide Dynamic Range	extremeWDR (120dB)	extremeWDR (120dB)	extremeWDR (120dB)	extremeWDR (120dB)	extremeWDR (120dB)
Digital Noise Reduction	WiseNR II (Based on AI engine), SSNR V	WiseNR II (Based on AI engine), SSNR V	WiseNR II (Based on AI engine), SSNR V	WiseNR II (Based on AI engine), SSNR V	WiseNR II (Based on AI engine), SSNR V
Digital Image Stabilization	Support (built-in gyro sensor)	Support (built-in gyro sensor)	Support (built-in gyro sensor)	Support (built-in gyro sensor)	Support (built-in gyro sensor)
Analytics	<p>Classified object type: Person/Face/Vehicle/License plate Attributes: Vehicle (Type: car/bus/truck/motorcycle/bicycle) Support DetectionShot Analytics events based on AI engine: Object detection, Virtual line (Crossing/Direction), Virtual area (Loitering/Intrusion/Enter/Exit) Analytics events: Defocus detection, Motion detection, Tampering, Fog detection, Audio detection, Sound classification, Shock detection, Virtual area (Appear/Disappear)</p>				
Business Intelligence	Based on AI engine : People counting, Queue management, Heatmap	Based on AI engine : People counting, Queue management, Heatmap	Based on AI engine : People counting, Queue management, Heatmap	Based on AI engine : People counting, Queue management, Heatmap	Based on AI engine : People counting, Queue management, Heatmap
Alarm I/O	2 configurable I/O ports	2 configurable I/O ports	2 configurable I/O ports	2 configurable I/O ports	2 configurable I/O ports
Audio I/O	Selectable (mic in/line in) / Line out	Selectable (mic in/line in) / Line out	Selectable (mic in/line in) / Line out	Selectable (mic in/line in) / Line out	Selectable (mic in/line in) / Line out
Video Compression	H.265 / H.264, MJPEG	H.265 / H.264, MJPEG	H.265 / H.264, MJPEG	H.265 / H.264, MJPEG	H.265 / H.264, MJPEG
WiseStream	WiseStream II, WiseStream III (Based on AI engine)	WiseStream II, WiseStream III (Based on AI engine)	WiseStream II, WiseStream III (Based on AI engine)	WiseStream II, WiseStream III (Based on AI engine)	WiseStream II, WiseStream III (Based on AI engine)
Streaming	Up to 10 profiles, 3 virtual channel support	Up to 10 profiles, 3 virtual channel support	Up to 10 profiles, 3 virtual channel support	Up to 10 profiles, 3 virtual channel support	Up to 10 profiles, 3 virtual channel support
Edge Storage	micro SD/SDHC/SDXC 1slot 512GB	micro SD/SDHC/SDXC 1slot 512GB	micro SD/SDHC/SDXC 1slot 512GB	micro SD/SDHC/SDXC 1slot 512GB	micro SD/SDHC/SDXC 1slot 512GB
Application Programming Interface	ONVIF Profile S/G/T/M SUNAPI (HTTP API) Wisenet open platform	ONVIF Profile S/G/T/M SUNAPI (HTTP API) Wisenet open platform	ONVIF Profile S/G/T/M SUNAPI (HTTP API) Wisenet open platform	ONVIF Profile S/G/T/M SUNAPI (HTTP API) Wisenet open platform	ONVIF Profile S/G/T/M SUNAPI (HTTP API) Wisenet open platform
Operating Temperature	-40°C ~ +55°C (-40°F ~ +131°F) * Maximum temperature : +60°C (intermittent) * Start up should be done at above -20°C NEMA TS-2 : 74°C 0~95%RH (Non-condensing) Humidity control /w GORE vent	-10°C ~ 50°C (14°F ~ +122°F) * Maximum temperature : +55°C (intermittent) 0~95% RH (non-condensing) Humidity control /w GORE vent	-40°C ~ +55°C (-40°F ~ +131°F) * Maximum temperature : +60°C (intermittent) * Start up should be done at above -20°C NEMA TS-2 : 74°C 0~95%RH (non-condensing) Humidity control /w GORE vent	-40°C ~ +55°C (-40°F ~ +131°F) * Maximum temperature : +60°C (intermittent) * Start up should be done at above -20°C NEMA TS-2 : 74°C 0~95%RH (non-condensing) Humidity control /w GORE vent	-10°C ~ 50°C (14°F ~ +122°F) * Maximum temperature : +55°C (intermittent) 0~95% RH (non-condensing) Humidity control /w GORE vent
Certification	IP66/IP67/NEMA4X, IK10	IP52, IK08	IP66/IP67/NEMA4X, IK10	IP66/IP67/NEMA4X, IK10	IP52, IK08
Power Consumption	PoE: Max 12.95W, typical 11.2W 12VDC: Max 13.2W, typical 10.8W	PoE: Max 12.95W, typical 11.2W 12VDC: Max 13.2W, typical 10.8W	PoE: Max 12.95W, typical 10.8W 12VDC: Max 12.5W, typical 10W	PoE: Max 12.95W, typical 10.8W 12VDC: Max 12.5W, typical 10W	PoE: Max 12.95W, typical 10.8W 12VDC: Max 12.5W, typical 10W
Dimensions (WxHxD) / Weight	Ø160 x 118mm (Ø6.3" x 4.65") 1.45kg (3.20lb)	Ø160 x 118mm (Ø6.3" x 4.65") 1.35kg (2.98lb)	Ø93.4 x 276.6mm (Ø3.68" x 10.89") 1.64kg (3.62lb)	Ø160 x 118mm (Ø6.3" x 4.65") 1.45kg (3.20lb)	Ø160 x 118mm (Ø6.3" x 4.65") 1.35kg (2.98lb)

NETWORK

ANALOG

PERIPHERAL

ACCESSORY

X Core



XNO-C6083R
2MP AI IR Bullet Camera

X Core



XNV-C6083R
2MP AI IR Vandal Dome Camera

X Core



XND-C6083RV
2MP AI Dome Camera



XNF-9013RV
4K AI Fisheye Camera

Imaging Device	1/2.8" progressive CMOS	1/2.8" progressive CMOS	1/2.8" progressive CMOS	1/2.3" 12MP CMOS
Resolution / Max. Frame Rate	2MP / 60fps	2MP / 60fps	2MP / 60fps	3008 x 3008 / 30fps
Min. Illumination	Color: 0.01Lux (F1.4, 1/30sec, 30IRE) B/W: 0Lux (IR LED on)	Color: 0.01Lux (F1.4, 1/30sec, 30IRE) B/W: 0Lux (IR LED on)	Color: 0.01Lux (F1.4, 1/30sec, 30IRE) B/W: 0Lux (IR LED on), 30/25fps	Color: 0.39 Lux (F2.2, 1/30sec) BW: 0Lux (IR LED on)
Video Output	Micro USB Type B	Micro USB Type B	Micro USB Type B	Micro USB Type B
Focal Length	2.8~12mm (4.3x) motorized varifocal	2.8~12mm (4.3x) motorized varifocal	2.8~12mm (4.3x) motorized varifocal	1.08mm fixed focal
Angular Field of View	H: 119.5° (Wide) ~ 27.9° (Tele) V: 62.8° (Wide) ~ 15.7° (Tele) D: 142.1° (Wide) ~ 32° (Tele)	H: 119.5° (Wide) ~ 27.9° (Tele) V: 62.8° (Wide) ~ 15.7° (Tele) D: 142.1° (Wide) ~ 32° (Tele)	H: 119.5° (Wide) ~ 27.9° (Tele) V: 62.8° (Wide) ~ 15.7° (Tele) D: 142.1° (Wide) ~ 32° (Tele)	H: 187° / V: 187° / D: 187°
Pan / Tilt / Rotate	-	0° ~ 360° / -45° ~ 75° / 0° ~ 355°	0° ~ 360° / -45° ~ 75° / 0° ~ 355°	Lens Rotation
IR Viewable Length	WiseIR 40m (131.23ft)	WiseIR 40m (131.23ft)	WiseIR 40m (131.23ft)	Wise IR, PoE : 8m(26.25ft), PoE+ : 13m(42.65ft)
Day & Night	Auto (ICR)	Auto (ICR)	Auto (ICR)	Auto (ICR)
Wide Dynamic Range	extremeWDR (150dB)	extremeWDR (150dB)	extremeWDR (150dB)	extremeWDR (120dB)
Digital Noise Reduction	WiseNR II (Based on AI engine), SSNR V	WiseNR II (Based on AI engine), SSNR V	WiseNR II (Based on AI engine), SSNR V	WiseNR II (Based on AI engine), SSNR V
Digital Image Stabilization	Support (built-in gyro sensor)	Support (built-in gyro sensor)	Support (built-in gyro sensor)	-
Analytics	<p>Classified object type: Person/Face/Vehicle/License plate Attributes: Vehicle (Type:car/bus/truck/motorcycle/bicycle) Support DetectionShot Analytics events based on AI engine: Object detection, Virtual line (Crossing/Direction), Virtual area (Loitering/Intrusion/Enter/Exit) Analytics events: Defocus detection, Motion detection, Tampering, Fog detection, Audio detection, Sound classification, Shock detection, Virtual area (Appear/Disappear)</p>			<p>Classified object type: Person/Face/Vehicle/License plate Support DetectionShot Analytics events based on AI engine: Object detection, Virtual line (Crossing/Direction), Virtual area (Loitering/Intrusion/Enter/Exit) Analytics events: Defocus detection, Motion detection, Tampering, Fog detection, Audio detection, Sound classification, Shock detection, Virtual area (Appear/Disappear)</p>
Business Intelligence	Based on AI engine : People counting, Queue management, Heatmap	Based on AI engine : People counting, Queue management, Heatmap	Based on AI engine : People counting, Queue management, Heatmap	Based on AI engine : People counting, Queue management, Heatmap
Alarm I/O	2 configurable I/O ports	2 configurable I/O ports	2 configurable I/O ports	2 configurable I/O ports
Audio I/O	Selectable (mic in/line in) / Line out	Selectable (mic in/line in) / Line out	Selectable (mic in/line in) / Line out	Selectable (mic in/line in) / Line out
Video Compression	H.265 / H.264, MJPEG	H.265 / H.264, MJPEG	H.265 / H.264, MJPEG	H.265/H.264, MJPEG
WiseStream	WiseStream II, WiseStream III (Based on AI engine)	WiseStream II, WiseStream III (Based on AI engine)	WiseStream II, WiseStream III (Based on AI engine)	WiseStream II, WiseStream III (Based on AI engine)
Streaming	Up to 10 profiles, 3 virtual channel support	Up to 10 profiles, 3 virtual channel support	Up to 10 profiles, 3 virtual channel support	Up to 10 profiles, 5 virtual channel support
Edge Storage	micro SD/SDHC/SDXC 1slot 512GB	micro SD/SDHC/SDXC 1slot 512GB	micro SD/SDHC/SDXC 1slot 512GB	micro SD/SDHC/SDXC 2slots 1TB (512GBx2)
Application Programming Interface	ONVIF Profile S/G/T/M SUNAPI (HTTP API) Wisenet open platform	ONVIF Profile S/G/T/M SUNAPI (HTTP API) Wisenet open platform	ONVIF Profile S/G/T/M SUNAPI (HTTP API) Wisenet open platform	ONVIF Profile S/G/T/M SUNAPI (HTTP API) Wisenet open platform
Operating Temperature	-40°F ~ +55°F (-40°F ~ +131°F) * Maximum temperature : +60°C (intermittent) * Start up should be done at above -20°F NEMA TS-2 : 74°F 0~95%RH (non-condensing) Humidity control /w GORE vent	-40°F ~ +55°F (-40°F ~ +131°F) * Maximum temperature : +60°C (intermittent) * Start up should be done at above -20°C NEMA TS-2 : 74°C 0~95%RH (non-condensing) Humidity control /w GORE vent	-10°C ~ 50°C (14°F ~ +122°F) * Maximum temperature : +55°C (intermittent) 0~95% RH (non-condensing) Humidity control /w GORE vent	-40°C ~ +60°C (-40°F ~ +140°F) / 0~95% RH POE+ Mode 55°C (Hysteresis 5°C)
Certification	IP66/IP67/NEMA4X, IK10	IP66/IP67/NEMA4X, IK10	IP52, IK08	IP66, IK10, NEMA4X
Power Consumption	PoE: Max 12.95W, typical 10.8W 12VDC: Max 12.5W, typical 10W	PoE: Max 12.95W, typical 10.8W 12VDC: Max 12.5W, typical 10W	PoE: Max 12.95W, typical 10.8W 12VDC: Max 12.5W, typical 10W	PoE: Max 12.95W, typical 9.4W, 12VDC: Max 12.9W, typical 9.0W / PoE+: Max 23.0W, typical 9.4W, 12VDC: Max 22.0W, typical 9.0W
Dimensions (WxHxD) / Weight	Ø93.4 x 276.6mm (Ø3.68" x 10.89") 1.64kg (3.62lb)	Ø160 x 118mm (Ø6.3" x 4.65") 1.45kg (3.20lb)	Ø160 x 118mm (Ø6.3" x 4.65") 1.35kg (2.98lb)	Ø160 x 72mm (Ø6.23" x 2.84") 1.17kg (2.58lb)

NETWORK

ANALOG

PERIPHERAL

ACCESSORY

AI PTZ Plus



NEW

XNP-C9303RW
8MP 30x AI PTZ Camera with wiper

AI PTZ Plus



NEW

XNP-C9253R
8MP 25x AI PTZ Camera

AI PTZ Plus



NEW

XNP-C9253
8MP 25x AI PTZ Camera

AI PTZ Plus



NEW

XNP-C8303RW
6MP 30x AI PTZ Camera with wiper

Imaging Device	1/2.8" CMOS	1/2.8" CMOS	1/2.8" CMOS	1/2.8" CMOS
Resolution / Max. Frame Rate	8MP / 30fps	8MP / 30fps	8MP / 30fps	6MP / 30fps
Min. Illumination	Color: 0.1Lux (F1.6, 1/30sec) BW: 0Lux (IR LED On)	Color: 0.1Lux (F1.6, 1/30sec) BW: 0Lux (IR LED On)	Color: 0.1Lux (F1.6, 1/30sec) BW: 0.01Lux (F1.6, 1/30sec)	Color: 0.1Lux (F1.6, 1/30sec) BW: 0Lux (IR LED On)
Video Output	-	-	-	-
Focal Length	5~150mm(30x) zoom (digital 32x, total 960x zoom)	5~125mm (25x) zoom (digital 32x, total 800x zoom)	5~125mm (25x) zoom (digital 32x, total 800x zoom)	5~150mm(30x) zoom (digital 32x, total 960x zoom)
Angular Field of View	H: 57.42° (Wide)~2.19° (Tele) V: 33.54° (Wide)~1.25° (Tele)	H: 57.42° (Wide)~2.71° (Tele) V: 33.54° (Wide)~1.55° (Tele)	H: 57.42° (Wide)~2.71° (Tele) V: 33.54° (Wide)~1.55° (Tele)	H: 57.42° (Wide)~2.19° (Tele) V: 33.54° (Wide)~1.25° (Tele)
Pan / Tilt / Rotate	0° ~360° / -20° ~90°	0° ~360° / -20° ~90°	0° ~360° / -20° ~90°	0° ~360° / -20° ~90°
IR Viewable Length	Wise IR 200m (656.17ft)	Wise IR 200m(656.17ft)	-	Wise IR 200m(656.17ft)
Day & Night	Auto (ICR)/Color/BW/Schedule	Auto (ICR)/Color/BW/Schedule	Auto (ICR)/Color/BW/Schedule	Auto (ICR)/Color/BW/Schedule
Wide Dynamic Range	extremeWDR (120dB)	extremeWDR (120dB)	extremeWDR (120dB)	extremeWDR (120dB)
Digital Noise Reduction	WiseNR II (Based on AI engine), SSNR V	WiseNR II (Based on AI engine), SSNR V	WiseNR II (Based on AI engine), SSNR V	WiseNR II (Based on AI engine), SSNR V
Digital Image Stabilization	Support (built-in gyro sensor)	Support (built-in gyro sensor)	Support (built-in gyro sensor)	Support (built-in gyro sensor)
Analytics	Classified object type: Person/Face/Vehicle/License plate Attributes: Vehicle(Type:car/bus/truck/motorcycle/bicycle) Support DetectionShot Analytics events based on AI engine: Object detection, Virtual line(Crossing/Direction), Virtual area(Loitering/Intrusion/Enter/Exit) Analytics events: Motion detection, Tampering, Fog detection, Audio detection, Sound classification(with NWI/O Box : SPM-4210), Shock detection, Virtual area(Appear/Disappear)			
Business Intelligence	-	-	-	-
Alarm I/O	Compatible with NWI/O Box (Optional)			
Audio I/O	Compatible with NWI/O Box (Optional)			
Video Compression	H.265/H.264, MJPEG	H.265/H.264, MJPEG	H.265/H.264, MJPEG	H.265/H.264, MJPEG
WiseStream	Manual (5ea area), WiseStream II (Based on AI engine), WiseStream III (Based on AI engine). Support with NEW I/O Box	Manual (5ea area), WiseStream II (Based on AI engine), WiseStream III (Based on AI engine). Support with NEW I/O Box	Manual (5ea area), WiseStream II (Based on AI engine), WiseStream III (Based on AI engine). Support with NEW I/O Box	Manual (5ea area), WiseStream II (Based on AI engine), WiseStream III (Based on AI engine). Support with NEW I/O Box
Streaming	Up to 10 profiles	Up to 10 profiles	Up to 10 profiles	Up to 10 profiles
Edge Storage	Micro SD/SDHC/SDXC 2slot 1TB	Micro SD/SDHC/SDXC 2slot 1TB	Micro SD/SDHC/SDXC 2slot 1TB	Micro SD/SDHC/SDXC 2slot 1TB
Application Programming Interface	ONVIF Profile S/G/T/M SUNAPI (HTTP API) Wisenet open platform	ONVIF Profile S/G/T/M SUNAPI (HTTP API) Wisenet open platform	ONVIF Profile S/G/T/M SUNAPI (HTTP API) Wisenet open platform	ONVIF Profile S/G/T/M SUNAPI (HTTP API) Wisenet open platform
Operating Temperature	-40° C~+55° C (-40° F~+131° F) / +74° C(+165° F) (MAX) based on NEMA-TS 2 (2.2.7) * Start up should be done at above -30° C 0~95% RH (Non-condensing)"	-40° C~+55° C (-40° F~+131° F) / +74° C(+165° F) (MAX) based on NEMA-TS 2 (2.2.7) * Start up should be done at above -30° C 0~95% RH (Non-condensing)"	-40° C~+55° C (-40° F~+131° F) / +74° C(+165° F) (MAX) based on NEMA-TS 2 (2.2.7) * Start up should be done at above -30° C 0~95% RH (Non-condensing)"	-40° C~+55° C (-40° F~+131° F) / +74° C(+165° F) (MAX) based on NEMA-TS 2 (2.2.7) * Start up should be done at above -30° C 0~95% RH (Non-condensing)"
Certification	IP66, IK10, NEMA4X, NEMA-TS 2 (2.2.8, 2.2.9)	IP66, IK10, NEMA4X, NEMA-TS 2 (2.2.8, 2.2.9)	IP66, IK10, NEMA4X, NEMA-TS 2 (2.2.8, 2.2.9)	IP66, IK10, NEMA4X, NEMA-TS 2 (2.2.8, 2.2.9)
Power Consumption	Typical 26W, Max 46W	Typical 24W, Max 40W	Typical 24W, Max 25.5W	Typical 26W, Max 46W
Dimensions (WxHxD) / Weight	Ø 184.9x318.8mm (7.28x12.55") 5.6kg (12.34lb)	Ø 158x293.3mm (6.22x11.55") 3.2kg (7.05lb)	Ø 158x293.3mm (6.22x11.55") 3.2kg (7.05lb)	Ø 184.9x318.8mm (7.28x12.55") 5.6kg (12.34lb)
Additional Features	Upgraded preset accuracy, Object auto tracking, Target lock tracking	Upgraded preset accuracy, Object auto tracking, Target lock tracking	Upgraded preset accuracy, Object auto tracking, Target lock tracking	Upgraded preset accuracy, Object auto tracking, Target lock tracking

AI PTZ Plus



XNP-C8253R
6MP 25x AI PTZ Camera

AI PTZ Plus



XNP-C8253
6MP 25x AI PTZ Camera

AI PTZ Plus



XNP-C6403RW
2MP 40x AI PTZ Camera with wiper

AI PTZ Plus



XNP-C6403R
2MP 40x AI PTZ Camera

AI PTZ Plus



XNP-C6403
2MP 40x AI PTZ Camera

Imaging Device	1/2.8" CMOS	1/2.8" CMOS	1/2.8" CMOS	1/2.8" CMOS	1/2.8" CMOS
Resolution / Max. Frame Rate	6MP / 30fps	6MP / 30fps	2MP / 60fps	2MP / 60fps	2MP / 60fps
Min. Illumination	Color: 0.1Lux (F1.6, 1/30sec) BW: 0Lux (IR LED On)	Color: 0.1Lux (F1.6, 1/30sec) BW: 0.01Lux (F1.6, 1/30sec)	Color: 0.05Lux (F1.6, 1/30sec) BW: 0Lux (IR LED On)	Color: 0.05Lux (F1.6, 1/30sec) BW: 0Lux (IR LED On)	Color: 0.05Lux (F1.6, 1/30sec) BW: 0.005Lux (F1.6, 1/30sec)
Video Output	-	-	-	-	-
Focal Length	5~125mm (25x) zoom (digital 32x, total 800x zoom)	5~125mm (25x) zoom (digital 32x, total 800x zoom)	4.25~170mm (40x) zoom (digital 32x, total 1280x zoom)	4.25~170mm (40x) zoom (digital 32x, total 1280x zoom)	4.25~170mm (40x) zoom (digital 32x, total 1280x zoom)
Angular Field of View	H: 57.42° (Wide)~2.71° (Tele) V: 33.54° (Wide)~1.55° (Tele)	H: 57.42° (Wide)~2.71° (Tele) V: 33.54° (Wide)~1.55° (Tele)	H: 65.66° (Wide)~1.88° (Tele) V: 39.4° (Wide)~1.09° (Tele)	H: 65.66° (Wide)~1.88° (Tele) V: 39.4° (Wide)~1.09° (Tele)	H: 65.66°(Wide)~1.88°(Tele) V: 39.4°(Wide)~1.09°(Tele)*
Pan / Tilt / Rotate	0° ~360° / -20° ~90°	0° ~360° / -20° ~90°	0° ~360° / -20° ~90°	0° ~360° / -20° ~90°	0° ~360° / -20° ~90°
IR Viewable Length	Wise IR 200m (656.17ft)	-	Wise IR 200m (656.17ft)	Wise IR 200m (656.17ft)	-
Day & Night	Auto (ICR)/Color/BW/Schedule	Auto (ICR)/Color/BW/Schedule	Auto (ICR)/Color/BW/Schedule	Auto (ICR)/Color/BW/Schedule	Auto (ICR)/Color/BW/Schedule
Wide Dynamic Range	extremeWDR (120dB)	extremeWDR (120dB)	extremeWDR (150dB)	extremeWDR (150dB)	extremeWDR (150dB)
Digital Noise Reduction	WiseNR II (Based on AI engine), SSNR V	WiseNR II (Based on AI engine), SSNR V	WiseNR II (Based on AI engine), SSNR V	WiseNR II (Based on AI engine), SSNR V	WiseNR II (Based on AI engine), SSNR V
Digital Image Stabilization	Support (built-in gyro sensor)	Support (built-in gyro sensor)	Support (built-in gyro sensor)	Support (built-in gyro sensor)	Support (built-in gyro sensor)

Classified object type : Person/Face/Vehicle/License plate
Attributes : Vehicle(Type:car/bus/truck/motorcycle/bicycle)
Support DetectionShot

Analytics events based on AI engine : Object detection, Virtual line(Crossing/Direction), Virtual area(Loitering/Intrusion/Enter/Exit)
Analytics events : Motion detection, Tampering, Fog detection, Audio detection, Sound classification(with NWI/O Box : SPM-4210), Shock detection, Virtual area(Appear/Disappear)

Business Intelligence	-	-	-	-	-
Alarm I/O	Compatible with NWI/O Box (Optional)				
Audio I/O	Compatible with NWI/O Box (Optional)				
Video Compression	H.265/H.264, MJPEG				
WiseStream	Manual (5ea area), WiseStream II (Based on AI)	Manual (5ea area), WiseStream II (Based on AI)	Manual (5ea area), WiseStream II (Based on AI)	Manual (5ea area), WiseStream II (Based on AI)	Manual (5ea area), WiseStream II (Based on AI)
Streaming	Up to 10 profiles				
Edge Storage	Micro SD/SDHC/SDXC 2slot 1TB	Micro SD/SDHC/SDXC 2slot 1TB			
Application Programming Interface	ONVIF Profile S/G/T/M SUNAPI (HTTP API) Wisenet open platform				
Operating Temperature	-40° C~+55° C (-40° F~+131° F) / +74° C(+165° F) (MAX) based on NEMA-TS 2 (2.2.7) * Start up should be done at above -30° C 0~95% RH (Non-condensing)*	-40° C~+55° C (-40° F~+131° F) / +74° C(+165° F) (MAX) based on NEMA-TS 2 (2.2.7) * Start up should be done at above -30° C 0~95% RH (Non-condensing)*	-40° C~+55° C (-40° F~+131° F) / +74° C(+165° F) (MAX) based on NEMA-TS 2 (2.2.7) * Start up should be done at above -30° C 0~95% RH (Non-condensing)*	-40° C~+50° C (-40° F~+122° F) / +74° C(+165° F) (MAX) based on NEMA-TS 2 (2.2.7) * Start up should be done at above -30° C 0~95% RH (Non-condensing)*	-40° C~+50° C (-40° F~+122° F) / +74° C(+165° F) (MAX) based on NEMA-TS 2 (2.2.7) * Start up should be done at above -30° C 0~95% RH (Non-condensing)*
Certification	IP66, IK10, NEMA4X, NEMA-TS 2 (2.2.8, 2.2.9)				
Power Consumption	Typical 24W, Max 40W	Typical 24W, Max 25.5W	Typical 26W, Max 46W	Typical 24W, Max 40W	Typical 24W, Max 25.5W
Dimensions (WxHxD) / Weight	Ø 158x293.3mm (6.22x11.55") 3.2kg (7.05lb)	Ø 158x293.3mm (6.22x11.55") 3.2kg (7.05lb)	Ø 184.9x318.8mm (7.28x12.55") 5.6kg (12.34lb)	Ø 158x293.3mm (6.22x11.55") 3.2kg (7.05lb)	Ø 158x293.3mm (6.22x11.55") 3.2kg (7.05lb)
Additional Features	Upgraded preset accuracy, Object auto tracking, Target lock tracking	Upgraded preset accuracy, Object auto tracking, Target lock tracking	Upgraded preset accuracy, Object auto tracking, Target lock tracking	Upgraded preset accuracy, Object auto tracking, Target lock tracking	Upgraded preset accuracy, Object auto tracking, Target lock tracking

NETWORK

ANALOG

PERIPHERAL

ACCESSORY



PNO-A9081R
4K AI IR Bullet Camera



PNV-A9081R
4K AI IR Vandal Dome Camera



PND-A9081RV
4K AI IR Dome Camera



PND-A9081RF
4K AI IR Dome Camera



PNB-A9001
4K AI Box Camera

Imaging Device	1/1.8" CMOS	1/1.8" CMOS	1/1.8" CMOS	1/1.8" CMOS	1/1.8" CMOS
Resolution / Max. Frame Rate	8MP / 30fps	8MP / 30fps	8MP / 30fps	8MP / 30fps	8MP / 30fps
Min. Illumination	Color: 0.05Lux (F1.6, 1/30sec) BW: 0Lux (IR LED on)	Color: 0.05Lux (F1.6, 1/30sec) BW: 0Lux (IR LED on)	Color: 0.05Lux (F1.6, 1/30sec) BW: 0Lux (IR LED on)	Color: 0.05Lux (F1.6, 1/30sec) BW: 0Lux (IR LED on)	Color: 0.03Lux (F1.2, 1/30sec)
Video Output	CVBS: 1.0 Vp-p, Micro USB Type B	CVBS: 1.0 Vp-p, Micro USB Type B	CVBS: 1.0 Vp-p, Micro USB Type B	CVBS: 1.0 Vp-p, Micro USB Type B	CVBS: 1.0 Vp-p, Micro USB Type B
Focal Length	4.5~10mm (2.2x) motorized varifocal	4.5~10mm (2.2x) motorized varifocal	4.5~10mm (2.2x) motorized varifocal	4.5~10mm (2.2x) motorized varifocal	-
Angular Field of View	H: 101.4° (Wide) ~ 45.5° (Tele) V: 53.6° (Wide) ~ 25.5° (Tele) D: 120.7° (Wide) ~ 52.3° (Tele)	H: 101.4° (Wide) ~ 45.5° (Tele) V: 53.6° (Wide) ~ 25.5° (Tele) D: 120.7° (Wide) ~ 52.3° (Tele)	H: 101.4° (Wide) ~ 45.5° (Tele) V: 53.6° (Wide) ~ 25.5° (Tele) D: 120.7° (Wide) ~ 52.3° (Tele)	H: 101.4° (Wide) ~ 45.5° (Tele) V: 53.6° (Wide) ~ 25.5° (Tele) D: 120.7° (Wide) ~ 52.3° (Tele)	-
Pan / Tilt / Rotate	-	0° ~ 360° / -45° ~ 85° / 0° ~ 355°	0° ~ 360° / -45° ~ 85° / 0° ~ 355°	0° ~ 360° / -45° ~ 85° / 0° ~ 355°	-
IR Viewable Length	30m (98.42ft)	30m (98.42ft)	30m (98.42ft)	30m (98.42ft)	-
Day & Night	Auto (ICR)	Auto (ICR)	Auto (ICR)	Auto (ICR)	Auto (ICR)
Wide Dynamic Range	120dB	120dB	120dB	120dB	120dB
Digital Noise Reduction	WiseNR II (Based on AI engine), SSNR V	WiseNR II (Based on AI engine), SSNR V	WiseNR II (Based on AI engine), SSNR V	WiseNR II (Based on AI engine), SSNR V	WiseNR II (Based on AI engine), SSNR V
Digital Image Stabilization	Support (built-in gyro sensor)	Support (built-in gyro sensor)	Support (built-in gyro sensor)	Support (built-in gyro sensor)	Support (built-in gyro sensor)
Analytics	<p>Classified object type: Person/Face/Vehicle/License plate</p> <p>Attributes: Person(Gender, Color and Bag), Face(Age, Gender, Mask and Glasses), Vehicle(Type:car/bus/truck/motorcycle/bicycle and Color)</p> <p>Support Bestshot per object Analytics events based on AI engine - Object detection, Virtual line*(Crossing/Direction), Virtual area</p> <p>* (Loitering/Intrusion/Enter/Exit), Face mask detection, Digital auto tracking, Social distancing detection</p> <p>Analytics events - Defocus detection, Motion detection, Tampering, Audio detection, Sound classification, Shock detection, Virtual area(Appear/Disappear)</p>				
Business Intelligence	Based on AI engine : People counting, Queue management, Heatmap	Based on AI engine : People counting, Queue management, Heatmap	Based on AI engine : People counting, Queue management, Heatmap	Based on AI engine : People counting, Queue management, Heatmap	Based on AI engine : People counting, Queue management, Heatmap
Alarm I/O	1/1	1/1	1/1	1/1	1/1
Audio I/O	Line in / Line out	Line in / Line out	Line in / Line out	Line in / Line out	Line in / Line out
Video Compression	H.265 / H.264, MJPEG	H.265 / H.264, MJPEG	H.265 / H.264, MJPEG	H.265 / H.264, MJPEG	H.265 / H.264, MJPEG
WiseStream	WiseStream II, WiseStream III (Based on AI engine)	WiseStream II, WiseStream III (Based on AI engine)	WiseStream II, WiseStream III (Based on AI engine)	WiseStream II, WiseStream III (Based on AI engine)	WiseStream II, WiseStream III (Based on AI engine)
Streaming	Up to 3 profiles	Up to 3 profiles	Up to 3 profiles	Up to 3 profiles	Up to 3 profiles
Edge Storage	micro SD/SDHC/SDXC	micro SD/SDHC/SDXC	micro SD/SDHC/SDXC	micro SD/SDHC/SDXC	micro SD/SDHC/SDXC
Application Programming Interface	ONVIF Profile S/G/T SUNAPI (HTTP API) Wisenet open platform	ONVIF Profile S/G/T SUNAPI (HTTP API) Wisenet open platform	ONVIF Profile S/G/T SUNAPI (HTTP API) Wisenet open platform	ONVIF Profile S/G/T SUNAPI (HTTP API) Wisenet open platform	ONVIF Profile S/G/T SUNAPI (HTTP API) Wisenet open platform
Operating Temperature	-40°C ~ +55°C (-40°F ~ +131°F) * Start up above -10°C	-40°C ~ +55°C (-40°F ~ +131°F) * Start up above -10°C	-25°C ~ +50°C (-13°F ~ +122°F)	-25°C ~ +50°C (-13°F ~ +122°F)	-10°C ~ +55°C (+14°F ~ +131°F)
Certification	IP66/IP67, IK 10, NEMA4X	IP66/IP67/IP6K9K, IK 10+, NEMA4X	IP52, IK 10	IP52, Plenum rate	-
Power Consumption	PoE+: Max 20W, typical 17W 12VDC: Max 18W, typical 16W	PoE+: Max 20W, typical 17W 12VDC: Max 18.7W, typical 15W	PoE+: Max 20W, typical 16W 12VDC: Max 17.7W, typical 14W	PoE+: Max 20W, typical 16W 12VDC: Max 17.7W, typical 14W	PoE+: Max 16.5W, typical 12.5W 12VDC: Max 13.5W, typical 10.8W
Dimensions (WxHxD) / Weight	Ø91 x 368.6mm (Ø3.58" x 14.51") (Without sunshield) 2.48kg (5.47lb)	Ø180 x 125mm (Ø7.09" x 4.92") 1.9kg (4.19lb)	Ø160 x 125mm (Ø6.3" x 4.92") 1.6kg (3.53lb)	Ø205 x 163mm (Ø8.07" x 6.42") 1.95kg (4.30lb)	W 73.1 x H 66.6 x D 147.8mm 700g (1.54lb)
Additional Features	AI : BestShot, Attributes (Person, Vehicle, Face, License plate)	AI : BestShot, Attributes (Person, Vehicle, Face, License plate)	AI : BestShot, Attributes (Person, Vehicle, Face, License plate)	AI : BestShot, Attributes (Person, Vehicle, Face, License plate)	AI : BestShot, Attributes (Person, Vehicle, Face, License plate)



PNO-A6081R
2MP AI IR Bullet Camera



PNV-A6081R
2MP AI IR Vandal Dome Camera



PND-A6081RV
2MP AI IR Dome Camera



PND-A6081RF
2MP AI IR Dome Camera



PNB-A6001
2MP AI Box Camera

	PNO-A6081R 2MP AI IR Bullet Camera	PNV-A6081R 2MP AI IR Vandal Dome Camera	PND-A6081RV 2MP AI IR Dome Camera	PND-A6081RF 2MP AI IR Dome Camera	PNB-A6001 2MP AI Box Camera
Imaging Device	1/2" CMOS	1/2" CMOS	1/2" CMOS	1/2" CMOS	1/2" CMOS
Resolution / Max. Frame Rate	2MP / 120fps	2MP / 120fps	2MP / 120fps	2MP / 120fps	2MP / 120fps
Min. Illumination	Color: 0.008Lux (F1.3) BW: 0Lux (IR LED on)	Color: 0.008Lux (F1.3) BW: 0Lux (IR LED on)	Color: 0.008Lux (F1.3) BW: 0Lux (IR LED on)	Color: 0.008Lux (F1.3) BW: 0Lux (IR LED on)	Color: 0.007Lux (F1.2, 1/30sec)
Video Output	CVBS: 1.0 Vp-p, Micro USB Type B	CVBS: 1.0 Vp-p, Micro USB Type B	CVBS: 1.0 Vp-p, Micro USB Type B	CVBS: 1.0 Vp-p, Micro USB Type B	CVBS: 1.0 Vp-p, Micro USB Type B
Focal Length	4.38 ~ 9.33mm (2.13x) motorized varifocal	4.38 ~ 9.33mm (2.13x) motorized varifocal	4.38 ~ 9.33mm (2.13x) motorized varifocal	4.38 ~ 9.33mm (2.13x) motorized varifocal	-
Angular Field of View	H: 103.1° (Wide) ~ 44.5° (Tele) V: 54.2° (Wide) ~ 24.9° (Tele) D: 124° (Wide) ~ 51.1° (Tele)	H: 103.1° (Wide) ~ 44.5° (Tele) V: 54.2° (Wide) ~ 24.9° (Tele) D: 124° (Wide) ~ 51.1° (Tele)	H: 103.1° (Wide) ~ 44.5° (Tele) V: 54.2° (Wide) ~ 24.9° (Tele) D: 124° (Wide) ~ 51.1° (Tele)	H: 103.1° (Wide) ~ 44.5° (Tele) V: 54.2° (Wide) ~ 24.9° (Tele) D: 124° (Wide) ~ 51.1° (Tele)	-
Pan / Tilt / Rotate	-	0° ~ 360° / -45° ~ 85° / 0° ~ 355°	0° ~ 360° / -45° ~ 85° / 0° ~ 355°	0° ~ 360° / -45° ~ 85° / 0° ~ 355°	-
IR Viewable Length	30m (98.42ft)	30m (98.42ft)	30m (98.42ft)	30m (98.42ft)	-
Day & Night	Auto (ICR)	Auto (ICR)	Auto (ICR)	Auto (ICR)	Auto (ICR)
Wide Dynamic Range	120dB	120dB	120dB	120dB	120dB
Digital Noise Reduction	WiseNR II (Based on AI engine), SSNR	WiseNR II (Based on AI engine), SSNR	WiseNR II (Based on AI engine), SSNR	WiseNR II (Based on AI engine), SSNR	WiseNR II (Based on AI engine), SSNR
Digital Image Stabilization	Support (built-in gyro sensor)	Support (built-in gyro sensor)	Support (built-in gyro sensor)	Support (built-in gyro sensor)	Support (built-in gyro sensor)
Analytics	<p align="center">Classified object type : Person/Face/Vehicle/License plate Attributes : Person(Gender, Color and Bag), Face(Age, Gender, Mask and Glasses), Vehicle(Type:car/bus/truck/motorcycle/bicycle and Color) Support BestShot per object Analytics events based on AI engine – Object detection, Virtual line*(Crossing/Direction), Virtual area *(Loitering/Intrusion/Enter/Exit), Face mask detection, Digital auto tracking, Social distancing detection Analytics events – Defocus detection, Motion detection, Tampering, Audio detection, Sound classification, Shock detection, Virtual area(Appear/Disappear)</p>				
Business Intelligence	Based on AI engine : People counting, Queue management, Heatmap	Based on AI engine : People counting, Queue management, Heatmap	Based on AI engine : People counting, Queue management, Heatmap	Based on AI engine : People counting, Queue management, Heatmap	Based on AI engine : People counting, Queue management, Heatmap
Alarm I/O	1/1	1/1	1/1	1/1	1/1
Audio I/O	Line in / Line out	Line in / Line out	Line in / Line out	Line in / Line out	Line in / Line out
Video Compression	H.265 / H.264, MJPEG	H.265 / H.264, MJPEG	H.265 / H.264, MJPEG	H.265 / H.264, MJPEG	H.265 / H.264, MJPEG
WiseStream	WiseStream II, WiseStream III (Based on AI engine)	WiseStream II, WiseStream III (Based on AI engine)	WiseStream II, WiseStream III (Based on AI engine)	WiseStream II, WiseStream III (Based on AI engine)	WiseStream II, WiseStream III (Based on AI engine)
Streaming	Up to 3 profiles	Up to 3 profiles	Up to 3 profiles	Up to 3 profiles	Up to 3 profiles
Edge Storage	micro SD/SDHC/SDXC	micro SD/SDHC/SDXC	micro SD/SDHC/SDXC	micro SD/SDHC/SDXC	micro SD/SDHC/SDXC
Application Programming Interface	ONVIF PROFILE S/G/T/M SUNAPI (HTTP API) Wisenet open platform	ONVIF PROFILE S/G/T/M SUNAPI (HTTP API) Wisenet open platform	ONVIF PROFILE S/G/T/M SUNAPI (HTTP API) Wisenet open platform	ONVIF PROFILE S/G/T/M SUNAPI (HTTP API) Wisenet open platform	ONVIF PROFILE S/G/T/M SUNAPI (HTTP API) Wisenet open platform
Operating Temperature	-40°C ~ +55°C (-40°F ~ +131°F) / 0~90% RH * Start up should be done at above -30°C	-40°C ~ +55°C (-40°F ~ +131°F) / 0~90% RH * Start up should be done at above -30°C	-25°C ~ +50°C (-13°F ~ +122°F) / 0~90% RH	-25°C ~ +50°C (-13°F ~ +122°F) / 0~90% RH	-10°C ~ +55°C(+14°F ~ +131°F) / 0~90% RH
Certification	IP66/IP67, IK10, NEMA4X	IP66/IP67/IP6K9K, IK10+, NEMA4X	IP52, IK10	IP52, IK10, Plenum rate	-
Power Consumption	PoE+: Max 20W, typical 17W 12VDC: Max 18W, typical 16W	PoE+: Max 20W, typical 17W 12VDC: Max 18.7W, typical 15W	PoE+: Max 20W, typical 16W 12VDC: Max 17.7W, typical 14W	PoE+: Max 20W, typical 16W 12VDC: Max 17.7W, typical 14W	PoE+: Max 16.5W, typical 12.5W 12VDC: Max 13.5W, typical 10.8W
Dimensions (WxHxD) / Weight	Ø91 x 368.6mm (3.58" x 14.51") (Without sunshield) 2.48kg (5.47lb)	Ø180 x 125mm (Ø7.09" x 4.92") 1.9kg (4.19lb)	Ø160 x 125mm (Ø6.3" x 4.92") 1.6kg (3.53lb)	Ø205 x 163mm (Ø8.07" x 4.92") 1.95kg (4.30lb)	W81 x H67 x D 165mm (3.19" x 2.64" x 6.48") 880g (1.94lb)
Additional Features	AI : BestShot, Attributes (Person, Vehicle, Face, License plate)	AI : BestShot, Attributes (Person, Vehicle, Face, License plate)	AI : BestShot, Attributes (Person, Vehicle, Face, License plate)	AI : BestShot, Attributes (Person, Vehicle, Face, License plate)	AI : BestShot, Attributes (Person, Vehicle, Face, License plate)



PNO-A9081RLP
4K AI LPR IR Bullet Camera



PNV-A9081RLP
4K AI LPR IR Vandal Dome Camera



PNB-A9001LP
4K AI LPR Box Camera

Imaging Device	1/1.8" CMOS		1/1.8" CMOS		1/1.8" CMOS	
Resolution / Max. Frame Rate	8MP / 30fps		8MP / 30fps		8MP / 30fps	
Min. Illumination	Color: 0.05Lux (F1.6, 1/30sec) BW: 0Lux (IR LED on)		Color: 0.05Lux (F1.6, 1/30sec) BW: 0.005Lux (F1.6, 1/30sec), 0Lux (IR LED on)		Color: 0.03Lux (F1.2, 1/30sec) B/W: 0.003Lux (F1.2, 1/30sec)	
Video Output	CVBS: 1.0 Vp-p, Micro USB Type B		CVBS: 1.0 Vp-p, Micro USB Type B		CVBS: 1.0 Vp-p, Micro USB Type B	
Focal Length	4.5 ~ 10mm (2.2x) motorized varifocal		4.5 ~ 10mm (2.2x) motorized varifocal		-	
Angular Field of View	H: 101.4° (Wide) ~ 45.5° (Tele) V: 53.6° (Wide) ~ 25.5° (Tele) D: 120.7° (Wide) ~ 52.3° (Tele)		H: 101.4° (Wide) ~ 45.5° (Tele) V: 53.6° (Wide) ~ 25.5° (Tele) D: 120.7° (Wide) ~ 52.3° (Tele)		-	
Pan / Tilt / Rotate	-		0° ~ 360° / -45° ~ 85° / 0° ~ 355°		-	
IR Viewable Length	30m (98.42ft)		30m (98.42ft)		-	
Day & Night	Auto (ICR)		Auto (ICR)		Auto (ICR)	
Wide Dynamic Range	-		-		-	
Digital Noise Reduction	SSNR V		SSNR V		SSNR V	
Digital Image Stabilization	Stabilization Support (built-in gyro sensor)		Stabilization Support (built-in gyro sensor)		Stabilization Support (built-in gyro sensor)	
Analytics	Defocus detection, Motion detection, Tampering, Audio detection, Sound classification, Shock detection		Defocus detection, Motion detection, Tampering, Audio detection, Sound classification, Shock detection		Defocus detection, Motion detection, Tampering, Audio detection, Sound classification, Shock detection	
Business Intelligence	-		-		-	
Alarm I/O	1/1		1/1		1/1	
Audio I/O	Selectable (mic in/line in/built-in mic) / Line out		Line in / Line out		Line in / Line out	
Video Compression	H.265 / H.264, MJPEG		H.265 / H.264, MJPEG		H.265 / H.264, MJPEG	
WiseStream	WiseStream II		WiseStream II		WiseStream II	
Streaming	Up to 3 profiles		Up to 3 profiles		Up to 3 profiles	
Edge Storage	Pre-installed with 32GB micro SD to support 10,000 LPR images		Pre-installed with 32GB micro SD to support 10,000 LPR images		Pre-installed with 32GB micro SD to support 10,000 LPR images	
Application Programming Interface	ONVIF Profile S/G/T SUNAPI (HTTP API) Wisenet open platform		ONVIF Profile S/G/T SUNAPI (HTTP API) Wisenet open platform		ONVIF Profile S/G/T SUNAPI (HTTP API) Wisenet open platform	
Operating Temperature	-40°C ~ +55°C (-40°F ~ +131°F) / 0~90% RH * Start up should be done at above -30°C		-40°C ~ +55°C (-40°F ~ +131°F) / 0~90% RH * Start up should be done at above -30°C		-10°C ~ +55°C (+14°F ~ +131°F) / 0~90% RH	
Certification	IP66/IP67, IK10, NEMA4X		IP66/IP67/IP6K9K, IK10+, NEMA4X		-	
Power Consumption	PoE+: Max 20W, typical 17W 12VDC: Max 18W, typical 16W		PoE+: Max 20W, typical 17W 12VDC: Max 18.7W, typical 15W		PoE+: Max 16.5W, typical 12.5W 12VDC: Max 13.5W, typical 10.8W	
Dimensions (WxHxD) / Weight	Ø91 x 368.6mm (Ø3.58" x 14.51") (Without sunshield) 2.48kg (5.47lb)		Ø180 x 125mm (Ø7.09" x 4.92") 1.9kg (4.19lb)		W81 x H67 x D165mm (3.19" x 2.64" x 6.48") 880g (1.94lb)	
	Wisenet Road AI		Wisenet Road AI		Wisenet Road AI	
Solution	Community Traffic Observation	Parking Application	Community Traffic Observation	Parking Application	City Traffic	
Speed Description	Moderate Speed	Low speed	Moderate Speed	Low speed	Regular Speed	
Lane Coverage	1 lane (3.6m/12ft Wide)	1 lane (3.6m/12ft Wide)	1 lane (3.6m/12ft Wide)	1 lane (3.6m/12ft Wide)	Up to 2 lanes	
Speed limit	Up to 70kmh (45mph)	Up to 70kmh (45mph)	Up to 70kmh (45mph)	Up to 40kmh (25mph)	Up to 100kmh (65mph)	
Min. Forward Distance	12m (38ft)	10m (33ft)	12m (38ft)	10m (33ft)	16m (52ft)	
Max. Forward Distance	12m (40ft)	13m (45ft)	12m (40ft)	13m (45ft)	36m (120ft)	
Max. Horizontal Angle	25°	30°	25°	30°	25°	
Max. Vertical Angle	25°	30°	25°	30°	25°	
Horizontal Offset	Up to 5m (18ft)	Up to 7m (24ft)	Up to 5m (18ft)	Up to 7m (24ft)	Up to 7m (24ft)	
Camera Height	Up to 5m (18ft)	Up to 7m (24ft)	Up to 5m (18ft)	Up to 7m (24ft)	Up to 7m (24ft)	
Vehicle Recognition	Make : 70+ / Model : 600+ / Color : 11		Make : 70+ / Model : 600+ / Color : 11		Make : 70+ / Model : 600+ / Color : 11	



NEW

PNM-C34404RQPZ
4K 4Ch PTRZ + 2MP 40x PTZ AI Camera



NEW

PNM-C32083RVQ
4K x 4ch AI Camera



NEW

PNM-C16083RVQ
4MP x 4ch AI Camera

Imaging Device	1/2.8" CMOS x 4CH	1/2.8" CMOS x 1CH PTZ	1/2.8" CMOS x 4CH	1/2.8" CMOS x 4CH
Resolution / Max. Frame Rate	8MP / 20fps	2MP / 60fps	8MP / 20fps	4MP / 30fps
Min. Illumination	Color: 0.1Lux(F1.5, 1/30sec, 30IRE) BW: 0.01Lux(F1.5, 1/30sec, 30IRE), 0Lux(IR LED on)	Color: 0.05Lux(F1.6, 1/30sec, 30IRE) BW: 0.005Lux(F1.6, 1/30sec, 30IRE), 0Lux(IR LED on)	Color: 0.1Lux(F1.5, 1/30sec, 30IRE) BW: 0.01Lux(F1.5, 1/30sec, 30IRE), 0Lux(IR LED on)	Color: 0.075Lux(F1.5, 1/30sec, 30IRE) BW: 0.0075Lux(F1.5, 1/30sec, 30IRE), 0Lux(IR LED on)
Video Output	-		USB: Micro USB Type B, 1280x720 for installation	USB: Micro USB Type B, 1280x720 for installation
Focal Length	3.3~5.7mm(1.7x) motorized varifocal	4.25~170mm(40x) zoom(digital 32x, total 1280x zoom)	3.3~5.7mm(1.7x) motorized varifocal	3.3~5.7mm(1.7x) motorized varifocal
Angular Field of View	H: 109° (Wide)~56° (Tele) V: 55° (Wide)~31° (Tele) D: 136° (Wide)~65° (Tele)	H: 65.66° (Wide)~1.88° (Tele) V: 39.40° (Wide)~1.09° (Tele)	H: 108.3° (Wide)~56.4° (Tele) V: 54.7° (Wide)~31.2° (Tele) D: 135.5° (Wide)~65.2° (Tele)	H: 99.8° (Wide)~53.0° (Tele) V: 53.8° (Wide)~30.7° (Tele) D: 124.3° (Wide)~61.8° (Tele)
Pan / Tilt / Rotate	0° ~360° / 9° ~65° / 0° ~90° * Tilt angle with Shield IR: 40° ~65°	0° ~360° / 0° ~110°	0~360° / 0~73° / 0~90°	0~360° / 0~73° / 0~90°
IR Viewable Length	20m (65.62ft)	WiseIR 200m (656.17ft)	WiseIR 20m (65.62ft)	WiseIR 20m(65.62ft)
Day & Night	Auto (ICR)		Auto (ICR)	Auto(ICR)
Wide Dynamic Range	120dB	extremeWDR (150dB)	120dB	120dB
Digital Noise Reduction	SSNR V, WiseNR II (Based on AI engine)	SSNR V, WiseNR II (Based on AI engine)	SSNR V, WiseNR II (Based on AI engine)	SSNR V, WiseNR II (Based on AI engine)
Digital Image Stabilization	-	Support	-	-
Analytics	Classified object type: Person/Face/Vehicle/License plate Attributes: Vehicle (Type: car/bus/truck/motorcycle/bicycle) Support BestShot Analytics events based on AI engine :Object detection, Virtual line*(Crossing/Direction), Virtual area*(Loitering/Intrusion/Enter/Exit) Analytics events : Defocus detection, Motion detection, Tampering, -Virtual area(Appear/Disappear)	Analytics events : Motion detection, Fog detection, Tampering, Virtual area(Loitering/Intrusion/Enter/Exit/Appear/Disappear), Virtual line(Crossing/Direction)	Classified object type: Person/Vehicle Attributes: Vehicle (Type: car/bus/truck/motorcycle/bicycle) Support BestShot Analytics events based on AI engine : Object detection, Virtual line(Crossing/Direction), Virtual area(Loitering/Intrusion/Enter/Exit) Analytics events : Defocus detection, Motion detection, Tampering, Audio detection, Sound classification, Virtual area(Appear/Disappear)	Classified object type: Person/Vehicle Attributes: Vehicle (Type: car/bus/truck/motorcycle/bicycle) Support BestShot Analytics events based on AI engine : Object detection, Virtual line(Crossing/Direction), Virtual area(Loitering/Intrusion/Enter/Exit) Analytics events : Defocus detection, Motion detection, Tampering, Audio detection, Sound classification, Virtual area(Appear/Disappear)
Alarm I/O	-	-	2 configurable I/O ports * Support extra alarm I/O via optional SPM-4210 I/O box	2 configurable I/O ports * Support extra alarm I/O via optional SPM-4210 I/O box
Audio I/O	-	-	Selectable(mic in/line in) / -	Selectable(mic in/line in) / -
Video Compression	H.265/H.264, MJPEG	H.265/H.264, MJPEG	H.265/H.264, MJPEG	H.265/H.264, MJPEG
WiseStream	Manual(Sea area), WiseStream II, WiseStream III (Based on AI engine)		Manual(Sea area), WiseStream II, WiseStream III (Based on AI engine)	Manual(Sea area), WiseStream II, WiseStream III (Based on AI engine)
Streaming	Up to 3 profiles	Up to 10 profiles	Up to 3 profiles per channel	Up to 3 profiles per channel
Edge Storage	Micro SD/SDHC/SDXC 2slot 2TB(1TBx2)		Micro SD/SDHC/SDXC 2slot Max. 2TB(1TBx2)	Micro SD/SDHC/SDXC 2slot Max. 2TB(1TBx2)
Application Programming Interface	ONVIF Profile S/T SUNAPI (HTTP API) Wisenet open platform		ONVIF Profile S/T * Profile G/M will be supported soon. SUNAPI(HTTP API) Wisenet open platform	ONVIF Profile S/T * Profile G/M will be supported soon. SUNAPI(HTTP API) Wisenet open platform
Operating Temperature	-40° C~-50° C(-40° F~+122° F) +74° C(+165° F)(MAX) based on NEMA-TS 2(2.2.7) * Start up should be done at above -30° C 0~95% RH(non-condensing)		-40° C~-55° C(-40° F~+131° F) * Start up should be done at above -35° C 0~95% RH(non-condensing) Humidity control /w Air vent	-40° C~-55° C(-40° F~+131° F) * Start up should be done at above -35° C 0~95% RH(non-condensing) Humidity control /w Air vent
Certification	IP66, IK10, NEMA4X		IP66, IK10, NEMA4X	IP66, IK10, NEMA4X
Power Consumption	HPoE: Max 64.00W, typical 45.00W		PoE+: Max 25.5W, typical 22.0W HPoE: Max 33.0W, typical 22.0W	PoE+: Max 25.5W, typical 22.0W HPoE: Max 33.0W, typical 22.0W
Dimensions (WxHxD) / Weight	Ø 140x110.2mm(Ø 5.51x4.34"), 875g(1.93 lb)		Ø 250x114.2mm(Ø 9.84x4.50"), 2800g(6.17 lb)	Ø 250x114.2mm(Ø 9.84x4.50"), 2730g(6.02 lb)

NETWORK

ANALOG

PERIPHERAL

ACCESSORY



PNM-C12083RVD
6MP x 2CH AI Multi-directional Camera



PNM-C7083RVD
2MP x 2CH AI Multi-directional Camera



PNM-C9022RV
2MP x 4CH AI Multi-directional Camera

Imaging Device	1/2.8" CMOS x 2CH	1/2.8" CMOS x 2CH	1/2.8" CMOS x 4CH
Resolution / Max. Frame Rate	6MP / 15fps	2MP / 30fps	2MP / 20fps
Min. Illumination	Color: 0.16Lux (F1.67, 1/30sec, 30IRE) BW: 0Lux (IR LED on)	Color: 0.035Lux (F2.2, 1/30sec, 30IRE) BW: 0Lux (IR LED on)	Color: 0.1Lux (F2.0, 1/30sec) BW: 0.01Lux (F2.0, 1/30sec), 0Lux (IR LED on)
Video Output	Micro USB Type B	Micro USB Type B	Micro USB Type B
Focal Length	3.54 ~ 6.69mm (1.9x) motorized varifocal	3 ~ 6mm (2x) motorized varifocal per CH	2.8mm fixed focal (x4)
Angular Field of View	H: 96° (Wide) ~ 47° (Tele) V: 51° (Wide) ~ 26° (Tele) D: 113° (Wide) ~ 54° (Tele)	H: 107° (Wide) ~ 56° (Tele) V: 57° (Wide) ~ 31° (Tele) D: 126° (Wide) ~ 64° (Tele)	H: 209° , V: 60°
Pan / Tilt / Rotate	0° ~ 355° / 0° ~ 78° / 0° ~ 180°	0° ~ 355° / 0° ~ 78° / 0° ~ 180°	0° ~ 360° / 0° ~ 65° / -
IR Viewable Length	25m (82ft)	25m (82ft)	20m (65.62ft)
Day & Night	Auto (ICR)	Auto (ICR)	Auto (ICR)
Wide Dynamic Range	extremeWDR (120dB)	extremeWDR (120dB)	extremeWDR (120dB)
Digital Noise Reduction	WiseNR II (Based on AI engine), SSNR V	WiseNR II (Based on AI engine), SSNR V	WiseNR II (Based on AI engine), SSNR V
Digital Image Stabilization	-	-	-
Analytics	<p>Classified object type: Person/Face/Vehicle/License plate Attributes: Vehicle (Type:car/bus/truck/motorcycle/bicycle) Support BestShot Analytics events based on AI engine: Object detection, Virtual line (Crossing/Direction), Virtual area (Loitering/Intrusion/Enter/Exit) Analytics events*: Defocus detection, Motion detection, Tampering, Virtual area (Appear/Disappear) *Support Audio detection, Sound classification via optional SPM-4210 I/O box</p>	<p>Classified object type: Person/Face/Vehicle/License plate Attributes: Vehicle (Type:car/bus/truck/motorcycle/bicycle) Support BestShot Analytics events based on AI engine: Object detection, Virtual line (Crossing/Direction), Virtual area (Loitering/Intrusion/Enter/Exit) Analytics events*: Defocus detection, Motion detection, Tampering, Virtual area (Appear/Disappear) *Support Audio detection, Sound classification via optional SPM-4210 I/O box</p>	<p>Classified object type: Person/Face/Vehicle/License plate Attributes: Vehicle (Type:car/bus/truck/motorcycle/bicycle) Support BestShot Analytics events based on AI engine: Object detection, Virtual line (Crossing/Direction), Virtual area (Loitering/Intrusion/Enter/Exit) Analytics events*: Defocus detection, Motion detection, Tampering, Virtual area (Appear/Disappear)</p>
Business Intelligence	-	-	-
Alarm I/O	* Support Alarm via optional SPM-4210 I/O box	* Support Alarm via optional SPM-4210 I/O box	2 configurable I/O ports
Audio I/O	* Audio in/out via optional SPM-4210 I/O box	* Audio in/out via optional SPM-4210 I/O box	Selectable (mic in/line in) / Line out
Video Compression	H.265 / H.264, MJPEG	H.265 / H.264, MJPEG	H.265/H.264, MJPEG
WiseStream	WiseStream II , WiseStream III (Based on AI engine)	WiseStream II , WiseStream III (Based on AI engine)	WiseStream II , WiseStream III (Based on AI engine)
Streaming	Unicast (10 users) / Multicast 5 profiles per channel	Unicast (10 users) / Multicast 5 profiles per channel	Unicast (10 users) / Multicast 3 profiles per channel
Edge Storage	micro SD/SDHC/SDXC 1slot Max. 512GB	micro SD/SDHC/SDXC 1slot Max. 512GB	micro SD/SDHC/SDXC 2slot Max. 1TB (512GB * 2)
Application Programming Interface	ONVIF Profile S/T SUNAPI (HTTP API) Open platform	ONVIF Profile S/T SUNAPI (HTTP API) Open platform	ONVIF Profile S/G/T/M SUNAPI (HTTP API) Wisenet open platform
Operating Temperature	-40°C ~ +55°C (-40°F ~ +131°F) / 0~95% RH (Non-condensing)	-40°C ~ +55°C (-40°F ~ +131°F) / 0~95% RH (Non-condensing)	-40°C ~ +55°C (-40°F ~ +131°F) / 0 ~ 95% RH (non-condensing)
Certification	IP66/IP67, NEMA4X, IK 10	IP66/IP67, NEMA4X, IK 10	IEC/EN 63000, IEC/EN 60529 IP66, IEC/EN 62262 IK 10, NEMA 250 type 4X"
Power Consumption	PoE+: Max 21W, typical 16.5W	PoE+: Max 20W, typical 15.5W	PoE+: Max 24.5W, typical 11.3W 12VDC: Max 22.0W, typical 10.4W Power redundancy failover
Dimensions (WxHxD) / Weight	W 215 x H 135 x D 93.2mm (8.46" x 5.31" x 3.67") 1.33kg (2.93lb)	W 215 x H 135 x D 93.2mm (8.46" x 5.31" x 3.67") 1.33kg (2.93lb)	Ø253x170mm (Ø9.96" x 6.69") 2.9kg (6.39lb)



NEW

QNO-C9083R
8MP IR Bullet Camera



NEW

QNO-C8083R
5MP IR Bullet Camera



NEW

QNV-C9083R
8MP IR Vandal Dome Camera



NEW

QNV-C8083R
5MP IR Vandal Dome Camera

Imaging Device	1/2.8" CMOS	1/2.8" CMOS	1/2.8" CMOS	1/2.8" CMOS
Resolution / Max. Frame Rate	8MP / 30fps	5MP / 30fps	8MP / 30fps	5MP / 30fps
Min. Illumination	Color: 0.06Lux (F1.6, 1/30sec) B/W: 0.006Lux (F1.6, 1/30sec, 30IRE), 0Lux (IR LED on)	Color: 0.07Lux (F1.6, 1/30sec) B/W: 0.007Lux (F1.6, 1/30sec, 30IRE), 0Lux (IR LED on)	Color: 0.06Lux (F1.6, 1/30sec) B/W: 0.006Lux (F1.6, 1/30sec, 30IRE), 0Lux (IR LED on)	Color: 0.07Lux (F1.6, 1/30sec) B/W: 0.007Lux (F1.6, 1/30sec, 30IRE), 0Lux (IR LED on)
Video Output	USB: Micro USB Type B, 1280x720 for installation	USB: Micro USB Type B, 1280x720 for installation	USB: Micro USB Type B, 1280x720 for installation	USB: Micro USB Type B, 1280x720 for installation
Focal Length	3.2~10.2mm (3.2x) motorized varifocal			
Angular Field of View	H: 104° (wide)~31° (tele) V: 55° (wide)~17° (tele) D: 124° (wide)~35° (tele)	H: 95° (wide)~29° (tele) V: 69° (wide)~21° (tele) D: 126° (wide)~36° (tele)	H: 104° (wide)~31° (tele) V: 55° (wide)~17° (tele) D: 124° (wide)~35° (tele)	H: 95° (wide)~29° (tele) V: 69° (wide)~21° (tele) D: 126° (wide)~36° (tele)
Pan / Tilt / Rotate	-	-	0° ~350° / -35° ~70° / 0° ~355°	0° ~350° / -35° ~70° / 0° ~355°
IR Viewable Length	30m(98.42ft)	30m(98.42ft)	30m(98.42ft)	30m(98.42ft)
Day & Night	Auto (ICR)	Auto (ICR)	Auto (ICR)	Auto (ICR)
Wide Dynamic Range	120db	120db	120db	120db
Digital Noise Reduction	SSNR V, WiseNR II (Based on AI engine)	SSNR V, WiseNR II (Based on AI engine)	SSNR V, WiseNR II (Based on AI engine)	SSNR V, WiseNR II (Based on AI engine)
Digital Image Stabilization	-	-	-	-
Analytics	Classified object type: Person/Vehicle Attributes: Vehicle (Type:car/bus/truck/motorcycle/bicycle) Support DetectionShot Analytics events based on AI engine : Motion detection, Object detection, Virtual line (Crossing/Direction), Virtual area (Loitering/Intrusion/Enter/Exit) Analytics events: Defocus detection, Tampering, Virtual area(Appear/Disappear)	Classified object type: Person/Vehicle Attributes: Vehicle (Type:car/bus/truck/motorcycle/bicycle) Support DetectionShot Analytics events based on AI engine : Motion detection, Object detection, Virtual line (Crossing/Direction), Virtual area (Loitering/Intrusion/Enter/Exit) Analytics events: Defocus detection, Tampering, Virtual area(Appear/Disappear)	Classified object type: Person/Vehicle Attributes: Vehicle (Type:car/bus/truck/motorcycle/bicycle) Support DetectionShot Analytics events based on AI engine : Motion detection, Object detection, Virtual line (Crossing/Direction), Virtual area (Loitering/Intrusion/Enter/Exit) Analytics events: Defocus detection, Tampering, Virtual area(Appear/Disappear)	Classified object type: Person/Vehicle Attributes: Vehicle (Type:car/bus/truck/motorcycle/bicycle) Support DetectionShot Analytics events based on AI engine : Motion detection, Object detection, Virtual line (Crossing/Direction), Virtual area (Loitering/Intrusion/Enter/Exit) Analytics events: Defocus detection, Tampering, Virtual area(Appear/Disappear)
Business Intelligence	Based on AI engine: People counting, Vehicle counting, Queue management, Heatmap	Based on AI engine: People counting, Vehicle counting, Queue management, Heatmap	Based on AI engine: People counting, Vehicle counting, Queue management, Heatmap	Based on AI engine: People counting, Vehicle counting, Queue management, Heatmap
Alarm I/O	Input 1ea / Output 1ea	Input 1ea / Output 1ea	Input 1ea / Output 1ea * Alarm I/O is supported through an optional cable (SPP-C7400)	Input 1ea / Output 1ea * Alarm I/O is supported through an optional cable (SPP-C7400)
Audio I/O	Selectable(mic in/line in) / Line out			
Video Compression	H.265/H.264, MJPEG	H.265/H.264, MJPEG	H.265/H.264, MJPEG	H.265/H.264, MJPEG
Streaming	Up to 5 profiles			
Edge Storage	micro SD/SDHC/SDXC 1slot 256GB			
Application Programming Interface	ONVIF Profile S/G/T/M SUNAPI(HTTP API)			
Operating Temperature	-30°C~+55°C(-22°F~+131°F) / 0~95% RH (Non-condensing) * Start up should be done at above -30°C Humidity control /w air vent	-30°C~+55°C(-22°F~+131°F) / 0~95% RH (Non-condensing) * Start up should be done at above -30°C Humidity control /w air vent	-30°C~+55°C(-22°F~+131°F) / 0~95% RH (Non-condensing) * Start up should be done at above -30°C Humidity control /w air vent	-30°C~+55°C(-22°F~+131°F) / 0~95% RH (Non-condensing) * Start up should be done at above -30°C Humidity control /w air vent
Certification	IP66, IK10	IP66, IK10	IP66, IK10	IP66, IK10
Power Consumption	PoE: Max 12W, typical 5.3W	PoE: Max 12W, typical 5.3W	PoE: Max 12.95W, typical 5.3W	PoE: Max 12.95W, typical 5.3W
Dimensions (WxHxD) / Weight	Ø93.4x245.8mm(Ø3.68x9.68"), 930g(2.05 lb)	Ø93.4x245.8mm(Ø3.68x9.68"), 930g(2.05 lb)	Ø140x110.2mm(Ø5.51x4.34"), 875g(1.93 lb)	Ø140x110.2mm(Ø5.51x4.34"), 875g(1.93 lb)

NETWORK

ANALOG

PERIPHERAL

ACCESSORY



QNV-C9011R
8MP IR Vandal Dome Camera



QNV-C8011R
5MP IR Vandal Dome Camera



QNV-C8012
5MP Vandal Dome Camera

Imaging Device	1/2.8" CMOS	1/2.8" CMOS	1/2.8" CMOS
Resolution / Max. Frame Rate	8MP / 30fps	5MP / 30fps	5MP / 30fps
Min. Illumination	Color: 0.03Lux (F1.6, 1/30sec) B/W: 0.003Lux (F1.6, 1/30sec, 30IRE), 0Lux (IR LED on)	Color: 0.03Lux (F1.6, 1/30sec) B/W: 0.003Lux (F1.6, 1/30sec, 30IRE), 0Lux (IR LED on)	Color: 0.05Lux (F2.0, 1/30sec) B/W: 0.005Lux (F2.0, 1/30sec, 30IRE)
Video Output	USB: Micro USB Type B, 1280x720 for installation	USB: Micro USB Type B, 1280x720 for installation	USB: Micro USB Type B, 1280x720 for installation
Focal Length	3.0mm fixed focal	3.0mm fixed focal	2.4mm fixed focal
Angular Field of View	H: 108° / V: 59° / D: 127°	H: 100° / V: 73° / D: 129°	H: 123° / V: 91° / D: 159°
Pan / Tilt / Rotate	0° ~350° / -35° ~70° / 0° ~355°	0° ~350° / -35° ~70° / 0° ~355°	0° ~350° / -35° ~70° / 0° ~355°
IR Viewable Length	20m(65.62ft)	20m(65.62ft)	-
Day & Night	Auto (ICR)	Auto (ICR)	Auto (ICR)
Wide Dynamic Range	120db	120db	120db
Digital Noise Reduction	SSNR V , WiseNR II (Based on AI engine)	SSNR V , WiseNR II (Based on AI engine)	SSNR V , WiseNR II (Based on AI engine)
Digital Image Stabilization	-	-	-
Analytics	Classified object type: Person/Vehicle Attributes: Vehicle(Type:car/bus/truck/motorcycle/bicycle) Support DetectionShot Analytics events based on AI engine : Motion detection, Object detection, Virtual line (Crossing/Direction), Virtual area (Loitering/Intrusion/Enter/Exit) Analytics events : Defocus detection, Tampering, Virtual area(Appear/Disappear)	Classified object type: Person/Vehicle Attributes: Vehicle(Type:car/bus/truck/motorcycle/bicycle) Support DetectionShot Analytics events based on AI engine : Motion detection, Object detection, Virtual line (Crossing/Direction), Virtual area (Loitering/Intrusion/Enter/Exit) Analytics events : Defocus detection, Tampering, Virtual area(Appear/Disappear)	Classified object type: Person/Vehicle Attributes: Vehicle(Type:car/bus/truck/motorcycle/bicycle) Support DetectionShot Analytics events based on AI engine : Motion detection, Object detection, Virtual line (Crossing/Direction), Virtual area (Loitering/Intrusion/Enter/Exit) Analytics events : Defocus detection, Tampering, Virtual area(Appear/Disappear)
Business Intelligence	Based on AI engine: People counting, Vehicle counting, Queue management, Heatmap	Based on AI engine: People counting, Vehicle counting, Queue management, Heatmap	Based on AI engine: People counting, Vehicle counting, Queue management, Heatmap
Alarm I/O	-	-	-
Audio I/O	-	-	-
Video Compression	H.265/H.264, MJPEG	H.265/H.264, MJPEG	H.265/H.264, MJPEG
Streaming	Up to 5 profiles	Up to 5 profiles	Up to 5 profiles
Edge Storage	micro SD/SDHC/SDXC 1slot 256GB	micro SD/SDHC/SDXC 1slot 256GB	micro SD/SDHC/SDXC 1slot 256GB
Application Programming Interface	ONVIF Profile S/G/T/M SUNAPI(HTTP API)	ONVIF Profile S/G/T/M SUNAPI(HTTP API)	ONVIF Profile S/G/T/M SUNAPI(HTTP API)
Operating Temperature	-40°C~+55°C(-40°F~+131°F) / 0~95% RH(Non-condensing) * Start up should be done at above -30°C Humidity control /w air vapor control	-40°C~+55°C(-40°F~+131°F) / 0~95% RH(Non-condensing) * Start up should be done at above -30°C Humidity control /w air vapor control	-40°C~+55°C(-40°F~+131°F) / 0~95% RH(Non-condensing) * Start up should be done at above -30°C Humidity control /w Air vapor control
Certification	IP66, IK10, NEMA4X	IP66, IK10, NEMA4X	IP66, IK10, NEMA4X
Power Consumption	PoE: Max 8.5W, typical 4.9W	PoE: Max 8.5W, typical 4.9W	PoE: Max 7W, typical 4.9W
Dimensions (WxHxD) / Weight	Ø110x77mm(Ø4.33x3.03"), 522g(1.15 lb)	Ø110x77mm(Ø4.33x3.03"), 522g(1.15 lb)	Ø110x77mm(Ø4.33x3.03"), 522g(1.15 lb)



TNM-C4960TD
Bi-spectrum AI Thermal Camera



TNM-C4950TD
Bi-spectrum AI Thermal Camera

Imaging Device	Thermal	Visible	Thermal	Visible
	VGA Uncooled micro bolometer(12μm)	1/1.8" CMOS	VGA Uncooled micro bolometer(12μm)	1/1.8" CMOS
Resolution / Max. Frame Rate	640 x 480 (can be scaled up to 1280 x 960) / 30fps	8MP / 30fps	640 x 480 (can be scaled up to 1280 x 960) / 30fps	8MP / 30fps
Min. Illumination	-	Color: 0.06Lux (F1.7, 1/30sec) BW: 0.005Lux (F1.7, 1/30sec)	-	Color: 0.06Lux (F1.7, 1/30sec) BW: 0.005Lux (F1.7, 1/30sec)
Video Output	USB: Micro USB Type B, 1280x720 for installation		USB: Micro USB Type B, 1280x720 for installation	
Focal Length	25mm fixed focal	10.9~29mm (2.6x) motorized varifocal	13.5mm fixed focal	10.9~29mm (2.6x) motorized varifocal
Angular Field of View	H: 17.4° / V: 13.1° / D: 21.6°	H:42° (Wide) ~ 15° (Tele) V:22.8° (Wide) ~ 8.4° (Tele) D:48.7° (Wide) ~ 17.1° (Tele)	H: 31.9° / V: 24.2° / D: 39.5°	H:42° (Wide) ~ 15° (Tele) V:22.8° (Wide) ~ 8.4° (Tele) D:48.7° (Wide) ~ 17.1° (Tele)
Pan / Tilt / Rotate	-		-	
IR Viewable Length	-		-	
Day & Night	-	Auto (ICR)	-	Auto (ICR)
Wide Dynamic Range	-	WDR (120dB)	-	WDR (120dB)
Digital Noise Reduction	-	SSNR V, WiseNR II	-	SSNR V, WiseNR II
Digital Image Stabilization	-	Support (built-in gyro sensor)	-	Support (built-in gyro sensor)
Analytics	Analytics events based on AI engine : Object detection (Person/Vehicle), Bestshot, IVA (Virtual line/Area, Enter/Exit, Loitering, direction, intrusion), Stopped vehicle, Traffic jam Analytics events : Motion detection	Analytics events based on AI engine (NPU) : Object detection (Person/Face/Vehicle (car/truck/bus/bicycle/motorcycle)/License plate), Bestshot, IVA (Virtual line/Area, Enter/Exit, Loitering, direction, intrusion), Stopped vehicle, Traffic jam Analytics events : Defocus detection, Motion detection, Tampering, Audio detection, Sound classification, Shock detection, Appear/Disappear	Analytics events based on AI engine : Object detection (Person/Vehicle), Bestshot, IVA (Virtual line/Area, Enter/Exit, Loitering, direction, intrusion), Stopped vehicle, Traffic jam -Analytics events : Motion detection	Analytics events based on AI engine (NPU) : Object detection (Person/Face/Vehicle (car/truck/bus/bicycle/motorcycle)/License plate), Bestshot, IVA (Virtual line/Area, Enter/Exit, Loitering, direction, intrusion), Stopped vehicle, Traffic jam Analytics events : Defocus detection, Motion detection, Tampering, Audio detection, Sound classification, Shock detection, Appear/Disappear
Business Intelligence	Vehicle counting		Vehicle counting	
Alarm I/O	4 configurable I/O ports		4 configurable I/O ports	
Audio I/O	Selectable (mic/in/line in) / Line out		Selectable (mic/in/line in) / Line out	
Video Compression	H.265 / H.264, MJPEG		H.265 / H.264, MJPEG	
WiseStream	WiseStream II	WiseStream III	WiseStream II	WiseStream III
Streaming	Up to 3 profiles		Up to 3 profiles	
Edge Storage	micro SD/SDHC/SDXC 2slots 512GB		micro SD/SDHC/SDXC 2slots 512GB	
Application Programming Interface	ONVIF Profile S/T SUNAPI (HTTP API) Wisenet open platform (visible channel only)		ONVIF Profile S/T SUNAPI (HTTP API) Wisenet open platform (visible channel only)	
Operating Temperature	-40°C ~ +60°C (-58°F ~ +140°F) * Start up should be done at above -30°C 0~95% RH (non-condensing)		-40°C ~ +60°C (-58°F ~ +140°F) * Start up should be done at above -30°C 0~95% RH (non-condensing)	
Certification	IP66/IP67, IK10, NEMA4X, NEMA TS 2 (2.2.8, 2.2.9)		IP66/IP67, IK10, NEMA4X, NEMA TS 2 (2.2.8, 2.2.9)	
Power Consumption	PoE+ : Max 23.5W 12VDC : Max 19.5W		PoE+ : Max 23.5W 12VDC : Max 19.5W	
Dimensions (WxHxD) / Weight	W 353.4 x H 287.5 x D 191.2mm (13.92" x 11.32" x 7.53") 4.53kg (9.99lb)		W 353.4 x H 287.5 x D 191.2mm (13.92" x 11.32" x 7.53") 4.53kg (9.99lb)	

NETWORK

ANALOG

PERIPHERAL

ACCESSORY



TNM-C4940TD
Bi-spectrum AI Thermal Camera



TNB-9000
8K Box Camera



TNV-C7013RC
AI Corner Mount Camera

Imaging Device	Thermal	Visible	43.3mm Full-frame CMOS	1/1.8" progressive CMOS
	VGA Uncooled micro bolometer(12um)	1/1.8" CMOS		
Resolution / Max. Frame Rate	640 x 480 (can be scaled up to 1280 x 960) / 30fps	8MP/ 30fps	8K/15fps	3MP / 30fps
Min. Illumination	-	Color: 0.06Lux (F1.7, 1/30sec) BW: 0Lux (IR LED on)	Color: 0.015Lux (F1.4) BW: 0.0015Lux (F1.4)	Color: 0.04Lux(F2.0, 1/30sec, 30IRE) BW: 0.04Lux(F2.0, 1/30sec, 30IRE), 0Lux(IR LED on)
Video Output	USB: Micro USB Type B, 1280x720 for installation		HDMI	-
Focal Length	9.1mm fixed focal	4.4~9.3mm (2.2x) motorized varifocal	-	2.39mm fixed focal
Angular Field of View	H: 50° / V: 37° / D: 63.8°	H: 112.1° (Wide) ~ 47.5° (Tele) V: 58° (Wide) ~ 26.6° (Tele) D: 137.5° (Wide) ~ 54.6° (Tele)	Canon 24mm, H: 57.4° Canon 35mm, H: 42.6° Canon 50mm, H: 30.9° Canon 85mm, H: 19.1° Canon 100mm, H: 16° Canon 70~200mm, H: 22.8° ~ 8°	H: 128° / V: 100°
IR Viewable Length	-	30m (98.42ft)	-	Wise IR 15m (49.21 ft), invisible 940mm wavelength
Day & Night	-	Auto (ICR)	Auto (ICR)	Auto (ICR)
Wide Dynamic Range	-	WDR (120dB)	-	extremeWDR (120dB)
Digital Noise Reduction	-	SSNR V, WiseNR II	SSNR V	SSNR V, WiseNR II (Based on AI engine)
Digital Image Stabilization	-	Support (built-in gyro sensor)	-	Support
Analytics	Analytics events based on AI engine: Object detection (Person/Vehicle), Bestshot, IVA (Virtual line/Area, Enter/Exit, Loitering, direction, intrusion), Stopped vehicle, Traffic jam Analytics events: Motion detection	Analytics events based on AI engine (NPU): Object detection (Person/Face/Vehicle (car/truck/bus/bicycle/motorcycle)/ License plate), Bestshot, IVA (Virtual line/Area, Enter/Exit, Loitering, direction, intrusion), Stopped vehicle, Traffic jam Analytics events: Defocus detection, Motion detection, Tampering, Audio detection, Sound classification, Shock detection, Appear/Disappear	Intelligent analytics, Audio detection, Sound classification	Classified object type: Person/Face/Vehicle/License plate Support DetectionShot Analytics events based on AI engine : Object detection, Virtual line(Crossing/Direction), Virtual area(Loitering/Intrusion/Enter/Exit) Analytics events : Defocus detection, Motion detection, Tampering, Audio detection, Sound classification, Virtual area(Appear/Disappear), Clothes color detection (Orange/Black/Red, @400lux)
Business Intelligence	Vehicle counting		-	-
Alarm I/O	4 configurable I/O ports		1 / 1	2 configurable I/O ports * Support Alarm via optional SPM-4210 I/O box
Audio I/O	Selectable (mic in/line in) / Line out		Selectable (mic in/line in) / Line out	Selectable (mic in/line in) / Line out
Video Compression	H.265 / H.264, MJPEG		H.265 / H.264, MJPEG	H.265/H.264, MJPEG
WiseStream	WiseStream II	WiseStream III	WiseStream II	Manual(Sea area), WiseStream II, WiseStream III (Based on AI engine)
Streaming	Up to 3 profiles		Up to 3 Profiles	Up to 10 profiles, 3 virtual channel support
Edge Storage	micro SD/SDHC/SDXC 2slots 512GB		micro SD/SDHC/SDXC	Micro SD/SDHC/SDXC 1slot 1TB
Application Programming Interface	ONVIF Profile S/T SUNAPI (HTTP API) Wisenet open platform (visible channel only)		ONVIF Profile S/G/T SUNAPI	ONVIF Profile S/G/T/M SUNAPI(HTTP API) Wisenet open platform
Operating Temperature	-40°C ~ +60°C (-58°F ~ +140°F) * Start up should be done at above -30°C 0~95% RH (non-condensing)		0°C ~ +45°C (32°F ~ +122°F)	-10°C ~ +55°C (14°F ~ +131°F) 0~95% RH (non-condensing) Humidity control / w AIR vent
Certification	IP66/IP67, IK10, NEMA4X, NEMA TS2 (2.2.8, 2.2.9)		EMC	IP66, IP6K9K, IK10+
Power Consumption	PoE+: Max 25.5W / 12VDC: Max 21.5W		PoE: Max 30W, typical 20W / 12VDC: Max 26W, typical 18W	PoE: Max 12.95W, typical 9.7W / DC: Max 12.7W, typical 9.0W
Dimensions (WxHxD) / Weight	W 353.4 x H 287.5 x D 191.2mm (13.92" x 11.32" x 7.53") 4.53kg (9.99lb)		W 120 x H 118.5 x D 179mm (4.72" x 4.66" x 7.04") 2.2kg (4.85lb)	198.3(W)x104.8(H)x198.6(D)mm(7.87"x4.13"x7.82"), 1,935g (4.27lb)
Additional Features	-		Super high resolution, Canon EF mount	-



XNO-9082R
4K IR Bullet Camera



XNV-9082R
4K IR Vandal Dome Camera



XND-9082RF
4K IR Dome Camera



XND-9082RV
4K IR Dome Camera



XNB-9002
4K Box Camera

Imaging Device	1/2.8" CMOS				
Resolution / Max. Frame Rate	4K / 30fps				
Min. Illumination	Color: 0.05Lux (F1.2, 1/30sec) B/W: 0Lux (IR LED On)	Color: 0.05Lux (F1.2, 1/30sec) B/W: 0Lux (IR LED On)	Color: 0.05Lux (F1.2, 1/30sec) B/W: 0Lux (IR LED On)	Color: 0.05Lux (F1.2, 1/30sec) B/W: 0Lux (IR LED On)	Color: 0.05Lux (F1.2, 1/30sec) B/W: 0.005Lux
Video Output	Micro USB Type B				
Focal Length	2.8 ~ 8.4mm (3x) motorized varifocal	-			
Angular Field of View	H: 114° (Wide) ~ 40.2° (Tele) V: 62° (Wide) ~ 22.5° (Tele) D: 133° (Wide) ~ 46.3° (Tele)	H: 114° (Wide) ~ 40.2° (Tele) V: 62° (Wide) ~ 22.5° (Tele) D: 133° (Wide) ~ 46.3° (Tele)	H: 114° (Wide) ~ 40.2° (Tele) V: 62° (Wide) ~ 22.5° (Tele) D: 133° (Wide) ~ 46.3° (Tele)	H: 114° (Wide) ~ 40.2° (Tele) V: 62° (Wide) ~ 22.5° (Tele) D: 133° (Wide) ~ 46.3° (Tele)	-
Pan / Tilt / Rotate	-	0° ~ 360° / -45° ~ 85° / 0° ~ 355°	0° ~ 360° / -45° ~ 85° / 0° ~ 355°	0° ~ 360° / -45° ~ 85° / 0° ~ 355°	-
IR Viewable Length	40m (131.23ft)	40m (131.23ft)	40m (131.23ft)	40m (131.23ft)	-
Day & Night	Auto (ICR)				
Wide Dynamic Range	extremeWDR (120dB)				
Digital Noise Reduction	SSNR V				
Digital Image Stabilization	Support (built-in gyro sensor)				
Analytics	Intelligent analytics Audio detection Sound classification Audio Playback Shock detection Face/upper body detection	Intelligent analytics Audio detection Sound classification Audio Playback Shock detection Face/upper body detection	Intelligent analytics Audio detection Sound classification Audio Playback Shock detection Face/upper body detection	Intelligent analytics Audio detection Sound classification Audio Playback Shock detection Face/upper body detection	Intelligent analytics Audio detection Sound classification Audio Playback Shock detection Face/upper body detection
Business Intelligence	People counting, Queue management, Heatmap				
Alarm I/O	2 configurable I/O ports				
Audio I/O	Selectable (mic in/line in) / Line out	Selectable (mic in/line in) / Line out	Selectable (mic in/line in) / Line out	Selectable (mic in/line in/Built-in mic) / Line out	Selectable (mic in/line in/Built-in mic) Supply voltage: 2.5VDC (4mA), Input impedance: 2K Ohm
Video Compression	H.265 / H.264, MJPEG				
WiseStream	WiseStream II				
Streaming	Up to 10 profiles				
Edge Storage	micro SD/SDHC/SDXC				
Application Programming Interface	ONVIF Profile S/G/T SUNAPI (HTTP API) Wisenet open platform				
Operating Temperature	-50°C ~ +60°C (-58°F ~ +140°F) / 0~95% RH (non condensing) * Start up should be done at above -30°C	-50°C ~ +60°C (-58°F ~ +140°F) / 0~95% RH (non condensing) * Start up should be done at above -30°C	-25°C ~ +60°C (-13°F ~ +140°F) / 0~95% RH (non condensing)	-25°C ~ +60°C (-13°F ~ +140°F) / 0~95% RH (non condensing)	-10°C ~ +55°C (+14°F ~ +131°F) / 0~95% RH (non condensing)
Certification	IP66/IP67, IK 10, NEMA4X	IP66/IP67/IP6K9K, IK 10+, NEMA4X	IP52, Plenum rate, IK 10	IP52, IK 10	-
Power Consumption	PoE: Max 12.95W, typical 10.5W 12VDC: Max 12.5W, typical 9.4W 24VAC: Max 14.5W, typical 11.2W	PoE: Max 12.95W, typical 10.5W 12VDC: Max 12.5W, typical 9.4W 24VAC: Max 14.5W, typical 11.2W	PoE: Max 12.95W, typical 10.7W 12VDC: Max 11.5W, typical 9W	PoE: Max 12.95W, typical 10.7W 12VDC: Max 11.5W, typical 9W	PoE: Max 12.95W, typical 8.2W 12VDC: Max 11.5W, typical 7.5W 24VAC: Max 13.5W, typical 8.9W
Dimensions (WxHxD) / Weight	Ø91 x 368.6mm (Ø3.85" x 14.51") 2.2kg (4.85lb)	Ø180 x 125mm (Ø7.09" x 4.92") 1.9kg (4.18lb)	Ø205 x 163mm (Ø8.07" x 6.42") 1.95kg (4.29lb)	Ø160 x 125mm (Ø6.3" x 4.92") 1.6kg (3.52lb)	W81 x H67 x D165mm(3.19" x 2.64" x 6.48") 880g (1.94lb)
Additional Features	UL CAP, Secure by Default				



XNO-8082R
6MP IR Bullet Camera



XNV-8082R
6MP IR Vandal Dome Camera



XND-8082RF
6MP IR Dome Camera



XND-8082RV
6MP IR Dome Camera



XNB-8002
6MP Box Camera

Imaging Device	1/2.8" CMOS	1/2.8" CMOS	1/2.8" CMOS	1/2.8" CMOS	1/2.8" CMOS
Resolution / Max. Frame Rate	6MP / 30fps	6MP / 30fps	6MP / 30fps	6MP / 30fps	6MP / 30fps
Min. Illumination	Color: 0.05Lux (F1.2, 1/30sec) B/W: 0Lux (IR LED On)	Color: 0.05Lux (F1.2, 1/30sec) B/W: 0Lux (IR LED On)	Color: 0.05Lux (F1.2, 1/30sec) B/W: 0Lux (IR LED On)	Color: 0.05Lux (F1.2, 1/30sec) B/W: 0Lux (IR LED On)	Color: 0.05Lux (F1.2, 1/30sec) B/W: 0.005Lux
Video Output	Micro USB Type B	Micro USB Type B	Micro USB Type B	Micro USB Type B	Micro USB Type B
Focal Length	2.8 ~ 8.4mm (3x) motorized varifocal	2.8 ~ 8.4mm (3x) motorized varifocal	2.8 ~ 8.4mm (3x) motorized varifocal	2.8 ~ 8.4mm (3x) motorized varifocal	-
Angular Field of View	H: 114° (Wide) ~ 40.2° (Tele) V: 62° (Wide) ~ 22.5° (Tele) D: 133° (Wide) ~ 46.3° (Tele)	H: 114° (Wide) ~ 40.2° (Tele) V: 62° (Wide) ~ 22.5° (Tele) D: 133° (Wide) ~ 46.3° (Tele)	H: 114° (Wide) ~ 40.2° (Tele) V: 62° (Wide) ~ 22.5° (Tele) D: 133° (Wide) ~ 46.3° (Tele)	H: 114° (Wide) ~ 40.2° (Tele) V: 62° (Wide) ~ 22.5° (Tele) D: 133° (Wide) ~ 46.3° (Tele)	-
Pan / Tilt / Rotate	-	0° ~ 360° / -45° ~ 85° / 0° ~ 355°	0° ~ 360° / -45° ~ 85° / 0° ~ 355°	0° ~ 360° / -45° ~ 85° / 0° ~ 355°	-
IR Viewable Length	40m (131.23ft)	40m (131.23ft)	40m (131.23ft)	40m (131.23ft)	-
Day & Night	Auto (ICR)	Auto (ICR)	Auto (ICR)	Auto (ICR)	Auto (ICR)
Wide Dynamic Range	extremeWDR	extremeWDR	extremeWDR	extremeWDR	extremeWDR
Digital Noise Reduction	SSNR V	SSNR V	SSNR V	SSNR V	SSNR V
Digital Image Stabilization	Support (built-in gyro sensor)	Support (built-in gyro sensor)	Support (built-in gyro sensor)	Support (built-in gyro sensor)	Support (built-in gyro sensor)
Analytics	Intelligent analytics, Audio detection, Sound classification, Audio Playback Shock detection, Face/upper body detection				
Business Intelligence	People counting, Queue management, Heatmap	People counting, Queue management, Heatmap	People counting, Queue management, Heatmap	People counting, Queue management, Heatmap	People counting, Queue management, Heatmap
Alarm I/O	2 configurable I/O ports	2 configurable I/O ports	2 configurable I/O ports	2 configurable I/O ports	2 configurable I/O ports
Audio I/O	Selectable (mic in/line in) / Line out	Selectable (mic in/line in/Built-in mic) / Line out	Selectable (mic in/line in/Built-in mic) / Line out	Selectable (mic in/line in/Built-in mic) / Line out	Selectable (mic in/line in/Built-in mic) / Line out
Video Compression	H.265 / H.264, MJPEG	H.265 / H.264, MJPEG	H.265 / H.264, MJPEG	H.265 / H.264, MJPEG	H.265 / H.264, MJPEG
WiseStream	WiseStream II	WiseStream II	WiseStream II	WiseStream II	WiseStream II
Streaming	Up to 10 profiles	Up to 10 profiles	Up to 10 profiles	Up to 10 profiles	Up to 10 profiles
Edge Storage	micro SD/SDHC/SDXC	micro SD/SDHC/SDXC	micro SD/SDHC/SDXC	micro SD/SDHC/SDXC	micro SD/SDHC/SDXC
Application Programming Interface	ONVIF Profile S/G/T SUNAPI (HTTP API) Wisenet open platform	ONVIF Profile S/G/T SUNAPI (HTTP API) Wisenet open platform	ONVIF Profile S/G/T SUNAPI (HTTP API) Wisenet open platform	ONVIF Profile S/G/T SUNAPI (HTTP API) Wisenet open platform	ONVIF Profile S/G/T SUNAPI (HTTP API) Wisenet open platform
Operating Temperature	-50°C ~ +60°C (-58°F ~ +140°F) / 0~95% RH (non condensing) * Start up should be done at above -30°C	-50°C ~ +60°C (-58°F ~ +140°F) / 0~95% RH (non condensing) * Start up should be done at above -30°C	-25°C ~ +60°C (-13°F ~ +140°F) / 0~95% RH (non condensing)	-25°C ~ +60°C (-13°F ~ +140°F) / 0~95% RH (non condensing)	-10°C ~ +55°C (+14°F ~ +131°F) / 0~95% RH (non condensing)
Certification	IP66/IP67, IK 10, NEMA4X	IP66/IP67/IP6K9K, IK 10+, NEMA4X	IP52, Plenum rate, IK 10	IP52, IK 10	-
Power Consumption	PoE: Max 12.95W, typical 10.5W 12VDC: Max 12.5W, typical 9.4W 24VAC: Max 14.5W, typical 11.2W	PoE: Max 12.95W, typical 10.7W 12VDC: Max 11.5W, typical 9W 24VAC: Max 13.5W, typical 11W	PoE: Max 12.95W, typical 10.7W 12VDC: Max 11.5W, typical 9W	PoE: Max 12.95W, typical 10.7W 12VDC: Max 11.5W, typical 9W	PoE: Max 12.95W, typical 8.2W 12VDC: Max 11.5W, typical 7.5W 24VAC: Max 13.5W, typical 8.9W
Dimensions (WxHxD) / Weight	Ø91 x 368.6mm (Ø3.85" x 14.51") 2.2kg (4.85lb)	Ø180 x 125mm (Ø7.09" x 4.92") 1.9kg (4.18lb)	Ø205 x 163mm (Ø8.07" x 6.42") 1.95kg (4.29lb)	Ø160 x 125mm (Ø6.3" x 4.92") 1.6kg (3.52lb)	W81 x H67 x D 165mm (3.19" x 2.64" x 6.48") 880g (1.94lb)
Additional Features	UL CAP, Secure by Default	UL CAP, Secure by Default	UL CAP, Secure by Default	UL CAP, Secure by Default	UL CAP, Secure by Default



XNV-8081RE
5MP IR Vandal Dome Camera



XND-8081REV
5MP IR Dome Camera



XNV-6081RE
2MP IR Vandal Dome Camera



XND-6081REV
2MP IR Dome Camera



XND-8081VZ
5MP Dome Camera

Imaging Device	1/1.8" CMOS	1/1.8" CMOS	1/2.8" CMOS	1/2.8" CMOS	1/1.8" CMOS
Resolution / Max. Frame Rate	5MP / 30fps	5MP / 30fps	2MP / 60fps	2MP / 60fps	5MP / 30fps
Min. Illumination	Color: 0.07Lux (F1.3, 1/30sec) BW: 0Lux (IR LED)	Color: 0.07Lux (F1.3, 1/30sec) BW: 0Lux (IR LED on)	Color: 0.015Lux (F1.4, 1/30sec) BW: 0Lux (IR LED)	Color: 0.015Lux (F1.4, 1/30sec) BW: 0Lux (IR LED)	Color: 0.07Lux (F1.2) B/W: 0.007Lux (F1.2)
Video Output	Micro USB Type B	Micro USB Type B			
Focal Length	3.9 ~ 9.4mm (2.4x) motorized varifocal	3.9 ~ 9.4mm (2.4x) motorized varifocal	2.8 ~ 12mm (4.3x) motorized varifocal	2.8 ~ 12mm (4.3x) motorized varifocal	3.6 ~ 9.4mm (2.6x) motorized varifocal
Angular Field of View	H: 92.1° (Wide) ~ 38.7° (Tele) V: 67.2° (Wide) ~ 29° (Tele) D: 119.9° (Wide) ~ 48.6° (Tele)	H: 92.1° (Wide) ~ 38.7° (Tele) V: 67.2° (Wide) ~ 29° (Tele) D: 119.9° (Wide) ~ 48.6° (Tele)	H: 119.5° (Wide) ~ 27.9° (Tele) V: 62.8° (Wide) ~ 15.7° (Tele) D: 142.1° (Wide) ~ 32° (Tele)	H: 119.5° (Wide) ~ 27.9° (Tele) V: 62.8° (Wide) ~ 15.7° (Tele) D: 142.1° (Wide) ~ 32° (Tele)	H: 102.5° (Wide) ~ 38.7° (Tele) V: 74.2° (Wide) ~ 29° (Tele) D: 135.5° (Wide) ~ 48.6° (Tele)
Pan / Tilt / Rotate	0° ~ 360° / -45° ~ 85° / 0° ~ 355°	0° ~ 360° / -45° ~ 85° / 0° ~ 355°	0° ~ 360° / -45° ~ 85° / 0° ~ 355°	0° ~ 360° / -45° ~ 85° / 0° ~ 355°	± 175° / 0 ~ 85° / ± 175° (Remote)
IR Viewable Length	50m (164.04ft)	50m (164.04ft)	50m (164.04ft)	50m (164.04ft)	-
Day & Night	Auto (ICR)	Auto (ICR)	Auto (ICR)	Auto (ICR)	Auto (ICR)
Wide Dynamic Range	120dB	120dB	150dB	150dB	120dB
Digital Noise Reduction	SSNR V	SSNR V	SSNR V	SSNR V	SSNR V
Digital Image Stabilization	Support (built-in gyro sensor)	Support (Built-in Gyro sensor)			
Analytics	Intelligent analytics Audio detection Sound classification Audio Playback Shock detection	Intelligent analytics Audio detection Sound classification Audio Playback Shock detection			
Business Intelligence	-	-	-	-	-
Alarm I/O	1 / 1	1 / 1	1 / 1	1 / 1	1 / 1
Audio I/O	Selectable (mic in/line in) / Line out	Selectable (mic in/line in), Built-in mic / Line out			
Video Compression	H.265 / H.264, MJPEG	H.265 / H.264, MJPEG			
WiseStream	WiseStream II	WiseStream II	WiseStream II	WiseStream II	WiseStream II
Streaming	Up to 10 profiles	Up to 10 Profiles			
Edge Storage	micro SD/SDHC/SDXC	micro SD/SDHC/SDXC	micro SD/SDHC/SDXC	micro SD/SDHC/SDXC	micro SD/SDHC/SDXC
Application Programming Interface	ONVIF Profile S/G/T SUNAPI (HTTP API) Wisenet open platform	ONVIF profile S/G/T, SUNAPI, Wisenet open platform			
Operating Temperature	-50°C ~ +60°C (-58°F ~ +140°F) / 0~90% RH * Start up should be done at above -35°C	-25°C ~ +60°C (-13°F ~ +140°F) / 0~90% RH	-50°C ~ +60°C (-58°F ~ +140°F) / 0~90% RH * Start up should be done at above -35°C	-25°C ~ +60°C (-13°F ~ +140°F) / 0~90% RH	-25°C ~ +60°C (-13°F ~ +140°F)
Certification	IP66/IP67/IP6K9K, IK10+, NEMA4X	IP52, IK10	IP66/IP67/IP6K9K, IK10+, NEMA4X	IP52, IK10	IP52, IK10
Power Consumption	Max 25.5W (Main CAM + Extension CAM) Typical 10.2W (Main CAM) * PoE Out: Max 12.95W at 80meters using CAT5/5E cable	Max 25.5W (Main CAM + Extension CAM) Typical 10.2W (Main CAM) * PoE Out: Max 12.95W at 80meters using CAT5/5E cable	Max 25. W (Main CAM + Extension CAM) Typical 10.2W (Main CAM) * PoE Out: Max 12.95W at 80meters using CAT5/5E cable	Max 25.5W (Main CAM + Extension CAM) Typical 10.2W (Main CAM) * PoE Out: Max 12.95W at 80meters using CAT5/5E cable	PoE : Max 11W 12VDC : Max 9W
Dimensions (WxHxD) / Weight	Ø 180 x 125mm (Ø7.09" x 4.92") 1.75kg (3.86lb)	Ø 160 x 125mm (Ø6.3" x 4.92") 1.45kg (3.20lb)	Ø 180 x 125mm (Ø7.09" x 4.92") 1.75kg (3.86lb)	Ø 160 x 125mm (Ø6.3" x 4.92") 1.45kg (3.20lb)	Ø 160 x 125mm (Ø6.3" x 4.92") 1.45kg (3.20lb)
Additional Features	PoE Extender Camera	PoE Extender Camera	PoE Extender Camera	PoE Extender Camera	Modular structure, Motorized PTRZ, Anti dust



XND-8081FZ
5MP Flush Mount Dome Camera



XND-8081RV
5MP IR Dome Camera



XND-8081F
5MP IR Flush Mount Dome Camera



XNV-8081Z
5MP Vandal Dome Camera



XNV-8081R
5MP IR Vandal Dome Camera

Imaging Device	1/1.8" CMOS				
Resolution / Max. Frame Rate	5MP / 30fps				
Min. Illumination	Color : 0.07Lux (F1.2) B/W : 0.007Lux (F1.2)	Color : 0.07Lux (F1.3) B/W : 0Lux (IR LED on)	Color : 0.07Lux (F1.3) B/W : 0Lux (IR LED on)	Color : 0.07 Lux (F1.2) B/W : 0.007 Lux (F1.2)	Color : 0.07Lux (F1.3) BW : 0Lux (IR LED)
Video Output	Micro USB Type B	CVBS 1.0 Vp-p, Micro USB Type B	CVBS 1.0 Vp-p, Micro USB Type B	Micro USB Type B	CVBS 1.0 Vp-p, Micro USB type B
Focal Length	3.6 ~ 9.4mm (2.6x) motorized varifocal	3.9 ~ 9.4mm (2.4x) motorized varifocal	3.9 ~ 9.4mm (2.4x) motorized varifocal	3.6 ~ 9.4mm (2.6x) motorized varifocal	3.9 ~ 9.4mm (2.4x) motorized varifocal
Angular Field of View	H: 102.5° (Wide) ~ 38.7° (Tele) V: 74.2° (Wide) ~ 29° (Tele) D: 135.5° (Wide) ~ 48.6° (Tele)	H: 92.1° (Wide) ~ 38.7° (Tele) V: 67.2° (Wide) ~ 29° (Tele) D: 119.9° (Wide) ~ 48.6° (Tele)	H: 92.1° (Wide) ~ 38.7° (Tele) V: 67.2° (Wide) ~ 29° (Tele) D: 119.9° (Wide) ~ 48.6° (Tele)	H: 102.5° (Wide) ~ 38.7° (Tele) V: 74.2° (Wide) ~ 29° (Tele) D: 135.5° (Wide) ~ 48.6° (Tele)	H: 92.1° (Wide) ~ 38.7° (Tele) V: 67.2° (Wide) ~ 29° (Tele) D: 119.9° (Wide) ~ 48.6° (Tele)
Pan / Tilt / Rotate	± 175° / 0 ~ 85° / ± 175° (Remote)	0° ~ 360° / -45° ~ 85° / 0° ~ 355°	0° ~ 360° / -45° ~ 85° / 0° ~ 355°	± 175° / 0 ~ 85° / ± 175° (Remote)	0° ~ 360° / -45° ~ 85° / 0° ~ 355°
IR Viewable Length	-	50m (164.04ft)	50m (164.04ft)	-	50m (164.04ft)
Day & Night	Auto (ICR)				
Wide Dynamic Range	120dB	120dB	120dB	120dB	120dB
Digital Noise Reduction	SSNR V				
Digital Image Stabilization	Support (Built-in Gyro sensor)				
Analytics	Intelligent analytics Audio detection Sound classification Audio Playback Shock detection				
Business Intelligence	-	-	-	-	-
Alarm I/O	1 / 1	1 / 1	1 / 1	1 / 1	1 / 1
Audio I/O	Selectable (mic in/line in) / Line out	Selectable (mic in/line in), Built-in mic / Line out	Selectable (mic in/line in) / Line out	Selectable (mic in/line in) / Line out	Selectable (mic in/line in) / Line out
Video Compression	H.265 / H.264, MJPEG				
WiseStream	WiseStream II				
Streaming	Up to 10 Profiles				
Edge Storage	micro SD/SDHC/SDXC				
Application Programming Interface	ONVIF profile S/G/T, SUNAPI, Wisenet open platform				
Operating Temperature	-25°C ~ +60°C (-13°F ~ +140°F)	-25°C ~ +60°C (-13°F ~ +140°F) / 0 ~ 90% RH	-25°C ~ +60°C (-13°F ~ +140°F)	-50°C ~ +60°C (-58°F ~ +140°F) * Start up above -35°C (-31°F)	-50°C ~ +60°C (-58°F ~ +140°F) * Start up above -35°C (-31°F)
Certification	IP52, Plenum rate	IP52, IK10	IP52, Plenum rate	IP67, IP66, IP6K9K, IK10+, NEMA4X	IP67, IP66, IP6K9K, IK10+, NEMA4X
Power Consumption	PoE: Max 11W 12VDC: Max 9W	PoE: Max 12.95W 12VDC: Max 11.7W	PoE: Max 12.95W 12VDC: Max 11.7W	PoE: Max 12.3W 12VDC: Max 10W 24VAC: Max 12.3W	PoE: Max 12.95W 12VDC: Max 11.7W 24VAC: Max 14.9W
Dimensions (WxHxD) / Weight	Ø 205 x 155mm (Ø 8.07" x 6.1") 1.85kg (4.08lb)	Ø 160 x 125mm (Ø 6.3" x 4.92") 1.45kg (3.20lb)	Ø 205 x 155mm (Ø 8.07" x 6.1") 1.8kg (3.97lb)	Ø 180 x 125mm (Ø 7.1" x 4.9") 1.75kg (3.86lb)	Ø 180 x 125mm (Ø 7.1" x 4.9") 1.75kg (3.86lb)
Additional Features	Modular structure, Motorized PTRZ, Anti dust	Modular structure, Anti dust	Modular structure, Anti dust	Modular structure, Motorized PTRZ	Modular structure



XND-6081V
2MP Dome Camera



XND-6081F
2MP Flush Mount Dome Camera



XND-6081VZ
2MP Dome Camera



XND-6081FZ
2MP Flush Mount Dome Camera



XND-6081RV
2MP IR Dome Camera

	XND-6081V 2MP Dome Camera	XND-6081F 2MP Flush Mount Dome Camera	XND-6081VZ 2MP Dome Camera	XND-6081FZ 2MP Flush Mount Dome Camera	XND-6081RV 2MP IR Dome Camera
Imaging Device	1/2.8" CMOS				
Resolution / Max. Frame Rate	2MP / 60fps				
Min. Illumination	Color : 0.015Lux (F1.4) B/W : 0.0015Lux (F1.4)	Color : 0.015Lux (F1.4) B/W : 0Lux (IRLED on)			
Video Output	CVBS 1.0Vp-p, Micro USB type B	CVBS 1.0Vp-p, Micro USB type B	Micro USB type B	Micro USB type B	CVBS 1.0Vp-p, Micro USB type B
Focal Length	2.8 ~ 12mm (4.3x) motorized varifocal				
Angular Field of View	H: 119.5° (Wide) ~ 27.9° (Tele) V: 62.8° (Wide) ~ 15.7° (Tele) D: 142.1° (Wide) ~ 32° (Tele)	H: 119.5° (Wide) ~ 27.9° (Tele) V: 62.8° (Wide) ~ 15.7° (Tele) D: 142.1° (Wide) ~ 32° (Tele)	H: 119.5° (Wide) ~ 27.9° (Tele) V: 62.8° (Wide) ~ 15.7° (Tele) D: 142.1° (Wide) ~ 32° (Tele)	H: 119.5° (Wide) ~ 27.9° (Tele) V: 62.8° (Wide) ~ 15.7° (Tele) D: 142.1° (Wide) ~ 32° (Tele)	H: 119.5° (Wide) ~ 27.9° (Tele) V: 62.8° (Wide) ~ 15.7° (Tele) D: 142.1° (Wide) ~ 32° (Tele)
Pan / Tilt / Rotate	0° ~ 360° / -45° ~ 85° / 0° ~ 355°	0° ~ 360° / -45° ~ 85° / 0° ~ 355°	± 175° / 0° ~ 85° / ± 175° (Remote)	± 175° / 0° ~ 85° / ± 175° (Remote)	0° ~ 360° / -45° ~ 85° / 0° ~ 355°
IR Viewable Length	-	-	-	-	50m (164.04ft)
Day & Night	Auto (ICR)				
Wide Dynamic Range	150dB	150dB	150dB	150dB	150dB
Digital Noise Reduction	SSNR V				
Digital Image Stabilization	Support (Built-in Gyro sensor)	Support (Built-in Gyro sensor)	Support (Built-in Gyro sensor)	Support	Support (Built-in Gyro sensor)
Analytics	Intelligent analytics Audio detection Sound classification Audio Playback Shock detection				
Business Intelligence	-	-	-	-	-
Alarm I/O	1 / 1	1 / 1	1 / 1	1 / 1	1 / 1
Audio I/O	Selectable (mic in/line in), Built-in mic / Line out	Selectable (mic in/line in) / Line out	Selectable (mic in/line in), Built-in mic / Line out	Selectable (mic in/line in) / Line out	Selectable (mic in/line in), Built-in mic / Line out
Video Compression	H.265 / H.264, MJPEG				
WiseStream	WiseStream II				
Streaming	Up to 10 Profiles				
Edge Storage	micro SD/SDHC/SDXC				
Application Programming Interface	ONVIF profile S/G/T, SUNAPI, Wisenet open platform				
Operating Temperature	-25°C ~ +60°C (-13°F ~ +140°F)				
Certification	IP52, IK10	IP52, Plenum rate	IP52, IK10	IP52, Plenum rate	IP52, IK10
Power Consumption	PoE: Max 7W 12VDC: Max 5.4W	PoE: Max 7W 12VDC: Max 5.4W	PoE: Max 10W 12VDC: Max 8.5W	PoE: Max 10W 12VDC: Max 8.5W	PoE: Max 12.95W 12VDC: Max 10.8W
Dimensions (WxHxD) / Weight	Ø160 x 125mm (Ø6.3" x 4.92") 1.45kg (3.2lb)	Ø205 x 155mm (Ø8.07" x 6.1") 1.8kg (3.97lb)	Ø160 x 125mm (Ø6.3" x 4.92") 1.45kg (3.2lb)	Ø205 x 155mm (Ø8.07" x 6.1") 1.85kg (4.08lb)	Ø160 x 125mm (Ø6.3" x 4.92") 1.45kg (3.2lb)
Additional Features	Modular structure, Anti dust	Modular structure, Anti dust	Modular structure, Motorized PTRZ, Anti dust	Modular structure, Motorized PTRZ, Anti dust	Modular design, Anti dust



XND-6081RF
2MP Flush Mount IR Dome Camera



XNV-6081Z
2MP Vandal Dome Camera



XNV-6081R
2MP IR Vandal Dome Camera



XNV-6081
2MP Vandal Dome Camera



XNB-8000
5MP Box Camera

Imaging Device	1/2.8" CMOS	1/2.8" CMOS	1/2.8" CMOS	1/2.8" CMOS	1/1.8" CMOS
Resolution / Max. Frame Rate	2MP / 60fps	2MP / 60fps	2MP / 60fps	2MP / 60fps	5MP / 30fps
Min. Illumination	Color : 0.015 Lux (F1.4) B/W : 0 Lux (IR LED on)	Color : 0.015 Lux (F1.4) B/W : 0.0015 Lux (F1.4)	Color : 0.015 Lux (F1.4) B/W : 0 Lux (IR LED)	Color : 0.015 Lux (F1.4) B/W : 0.0015 Lux (F1.4)	Color : 0.07 Lux (F1.2) B/W : 0.007 Lux (F1.2)
Video Output	CVBS 1.0Vp-p, Micro USB type B	Micro USB type B	CVBS 1.0Vp-p, Micro USB type B	CVBS 1.0Vp-p, Micro USB type B	CVBS 1.0 Vp-p, Micro USB Type B
Focal Length	2.8 ~ 12mm (4.3x) motorized varifocal	-			
Angular Field of View	H : 119.5° (Wide) ~ 27.9° (Tele) V : 62.8° (Wide) ~ 15.7° (Tele) D : 142.1° (Wide) ~ 32° (Tele)	H : 119.5° (Wide) ~ 27.9° (Tele) V : 62.8° (Wide) ~ 15.7° (Tele) D : 142.1° (Wide) ~ 32° (Tele)	H : 119.5° (Wide) ~ 27.9° (Tele) V : 62.8° (Wide) ~ 15.7° (Tele) D : 142.1° (Wide) ~ 32° (Tele)	H : 119.5° (Wide) ~ 27.9° (Tele) V : 62.8° (Wide) ~ 15.7° (Tele) D : 142.1° (Wide) ~ 32° (Tele)	-
Pan / Tilt / Rotate	0° ~ 360° / -45° ~ 85° / 0° ~ 355	± 175° / 0° ~ 85° / ± 175° (Remote)	0° ~ 360° / -45° ~ 85° / 0° ~ 355	0° ~ 360° / -45° ~ 85° / 0° ~ 355°	-
IR Viewable Length	50m (164.04ft)	-	50m (164.04ft)	-	-
Day & Night	Auto (ICR)	Auto (ICR)	Auto (ICR)	Auto (ICR)	Auto (ICR)
Wide Dynamic Range	150dB	150dB	150dB	150dB	120dB
Digital Noise Reduction	SSNR V	SSNR V	SSNR V	SSNR V	SSNR V
Digital Image Stabilization	Support (Built-in Gyro sensor)	Support (Built-in Gyro sensor)			
Analytics	Intelligent analytics Audio detection Sound classification Audio Playback Shock detection	Intelligent analytics Audio detection Sound classification			
Business Intelligence	-	-	-	-	-
Alarm I/O	1 / 1	1 / 1	1 / 1	1 / 1	1 / 1
Audio I/O	Selectable (mic in/line in) / Line out	Selectable (mic in/line in), Built-in mic / Line out			
Video Compression	H.265 / H.264, MJPEG	H.265 / H.264, MJPEG			
WiseStream	WiseStream II	WiseStream II	WiseStream II	WiseStream II	WiseStream II
Streaming	Up to 10 Profiles	Up to 10 Profiles			
Edge Storage	micro SD/SDHC/SDXC	micro SD/SDHC/SDXC	micro SD/SDHC/SDXC	micro SD/SDHC/SDXC	micro SD/SDHC/SDXC
Application Programming Interface	ONVIF profile S/G/T, SUNAPI, Wisenet open platform	ONVIF profile S/G, SUNAPI, Wisenet open platform			
Operating Temperature	-25°C ~ +60°C (-13°F ~ +140°F)	-50°C ~ +60°C (-58°F ~ +140°F) * Start up above -35°C (-31°F)	-50°C ~ +60°C (-58°F ~ +140°F) * Start up above -35°C (-31°F)	-50°C ~ +60°C (-58°F ~ +140°F) * Start up above -35°C (-31°F)	-10°C ~ +55°C (+14°F ~ +131°F)
Certification	IP52, Plenum rate	IP67, IP66, IP6K9K, IK10+, NEMA4X	IP67, IP66, IP6K9K, IK10+, NEMA4X	IP67, IP66, IP6K9K, IK10+, NEMA4X	-
Power Consumption	PoE : Max 12.95W 12VDC : Max 10.8W	PoE : Max 11W 12VDC : Max 9.5W 24VAC : Max 11W	PoE : Max 12.95W 12VDC : Max 10.8W 24VAC : Max 13.3W	PoE : Max 7W 12VDC : Max 5.4W 24VAC : Max 7.1W	PoE : Max 8.5W 12VDC : Max 7.5W 24VAC : Max 8.5W
Dimensions (WxHxD) / Weight	Ø205 x 155mm (Ø8.07" x 6.1") 1.8kg (3.97lb)	Ø180 x 125mm (Ø7.1" x 4.9") 1.75kg (3.86lb)	Ø180 x 125mm (Ø7.1" x 4.9") 1.75kg (3.86lb)	Ø180 x 125mm (Ø7.1" x 4.9") 1.45kg (3.20lb)	W73.1 x H66.6 x D147.8mm (2.88" x 2.62" x 5.82") 420g (0.93lb)
Additional Features	Modular design, Anti dust	Modular structure, Motorized PTRZ	Modular structure	Modular structure	Handover, Hallway View



XNO-8080R
5MP IR Bullet Camera



XNO-8020R/8030R/8040R
5MP IR Bullet Camera



XND-8080R/8080RV
5MP IR Dome Camera



XND-8020R/8030R/8040R
5MP IR Dome Camera



XND-8020F
5MP Flush Mount Dome Camera

Imaging Device	1/1.8" CMOS	1/1.8" CMOS	1/1.8" CMOS	1/1.8" CMOS	1/1.8" CMOS
Resolution / Max. Frame Rate	5MP / 30fps	5MP / 30fps	5MP / 30fps	5MP / 30fps	5MP / 30fps
Min. Illumination	Color : 0.07Lux (F1.3) B/W : 0Lux (IR LED on)	Color : 0.16Lux (F1.6) B/W : 0Lux (IR LED on)	Color : 0.07Lux (F1.3) B/W : 0Lux (IR LED on)	Color : 0.16Lux (F1.6) B/W : 0Lux (IR LED on)	Color : 0.16Lux (F1.6) B/W : 0.16Lux (F1.6)
Video Output	CVBS 1.0 Vp-p, Micro USB Type B	CVBS 1.0 Vp-p, Micro USB Type B	CVBS 1.0 Vp-p, Micro USB type B	CVBS 1.0Vp-p, Micro USB type B	Micro USB type B
Focal Length	3.7~9.4mm (2.5x) motorized varifocal	3.7mm fixed (XNO-8020R) 4.6mm fixed (XNO-8030R) 7.0mm fixed (XNO-8040R)	3.9~9.4m (2.4x) motorized varifocal	3.7mm fixed (XND-8020R) 4.6mm fixed (XND-8030R) 7.0mm fixed (XND-8040R)	3.7mm fixed
Angular Field of View	H: 100.2° (Wide) ~ 38.7° (Tele) V: 67.2° (Wide) ~ 29° (Tele) D: 119.9° (Wide) ~ 48.6° (Tele)	H: 97.5° / V: 71.9° / D: 126.2° (XNO-8020R) H: 77.9° / V: 57.9° / D: 98.7° (XNO-8030R) H: 50.7° / V: 37.8° / D: 63.8° (XNO-8040R)	H: 92.1° (Wide) ~ 38.7° (Tele) V: 67.2° (Wide) ~ 29° (Tele) D: 119.9° (Wide) ~ 48.6° (Tele)	H: 97.5° / V: 71.9° / D: 126.2° (XND-8020R) H: 77.9° / V: 57.9° / D: 98.7° (XND-8030R) H: 50.7° / V: 37.8° / D: 63.8° (XND-8040R)	H: 97.5° / V: 71.9° / D: 126.2°
Pan / Tilt / Rotate	-	-	0° ~ 354° / 0° ~ 67° / 0° ~ 355°	0° ~ 354° / 0° ~ 67° / 0° ~ 355°	0° ~ 355° / 0° ~ 47° / 0° ~ 353°
IR Viewable Length	50m (164.04ft)	30m (98.43ft)	30m (98.43ft)	30m (98.43ft)	-
Day & Night	Auto (ICR)	Auto (ICR)	Auto (ICR)	Auto (ICR)	Auto (Electrical)
Wide Dynamic Range	120dB	120dB	120dB	120dB	-
Digital Noise Reduction	SSNR V	SSNR V	SSNR V	SSNR V	SSNR V
Digital Image Stabilization	Support	Support	Support	Support (Built-in Gyro sensor)	Support
Analytics	Intelligent analytics Audio detection Sound classification	Intelligent analytics Audio detection Sound classification	Intelligent analytics Audio detection Sound classification	Intelligent analytics Audio detection Sound classification	Intelligent analytics Audio detection Sound classification
Business Intelligence	-	People counting, Queue management, Heatmap	-	People counting, Queue management, Heatmap	People counting, Queue management, Heatmap
Alarm I/O	1 / 1	1 / 1	1 / 1	1 / 1	-
Audio I/O	Selectable (mic in/line in) / Line out	Selectable (mic in/line in) / Line out	Selectable (mic in/line in) / Line out	Selectable (mic in/line in), Built-in mic / Line out	Built-in mic / -
Video Compression	H.265 / H.264, MJPEG	H.265 / H.264, MJPEG	H.265 / H.264, MJPEG	H.265 / H.264, MJPEG	H.265 / H.264, MJPEG
WiseStream	WiseStream II	WiseStream II	WiseStream II	WiseStream II	WiseStream II
Streaming	Up to 10 Profiles	Up to 10 Profiles	Up to 10 Profiles	Up to 10 Profiles	Up to 10 Profiles
Edge Storage	micro SD/SDHC/SDXC	micro SD/SDHC/SDXC	micro SD/SDHC/SDXC	micro SD/SDHC/SDXC	micro SD/SDHC/SDXC
Application Programming Interface	ONVIF profile S/G/T, SUNAPI, Wisenet open platform	ONVIF profile S/G/T, SUNAPI, Wisenet open platform	ONVIF profile S/G/T, SUNAPI, Wisenet open platform	ONVIF profile S/G, SUNAPI, Wisenet open platform	ONVIF profile S/G, SUNAPI, Wisenet open platform
Operating Temperature	-40°C ~ +55°C (-40°F ~ +131°F)	-30°C ~ +55°C (-22°F ~ +131°F) * Start up above -20°C (-4°F)	-10°C ~ +55°C (+14°F ~ +131°F)	-10°C ~ +55°C (+14°F ~ +131°F)	-10°C ~ +55°C (+14°F ~ +131°F)
Certification	IP67, IP66, NEMA4X, IK10	IP67/IP66/NEMA4X, IK10	IK08	IK08	-
Power Consumption	PoE: Max 12.95W 12VDC: Max 12.5W 24VAC: Max 14.5W	PoE: Max 10.3W 12VDC: Max 9.3W	PoE: Max 10W 12VDC: Max 9W	PoE: Max 9W 12VDC: Max 8W	PoE: Max 4.7W
Dimensions (WxHxD) / Weight	Ø91 x 368.6mm (Ø3.3" x 4.67") 2.18kg (4.81lb)	Ø70 x 296mm (Ø2.76" x 11.65") 1.22kg (2.69lb)	Ø140.8 x 113mm (Ø5.54" x 4.45") 628g (1.38lb) (XND-8080R) 732g (1.61lb) (XND-8080RV)	Ø110 x 90mm (Ø4.33" x 3.54") 380g (0.84lb)	Ø98.9 x 129.1mm (Ø3.89" x 5.08") 275g (0.61lb)
Additional Features	Handover, Hallway View	Handover, Hallway View	Handover, Hallway View	Handover, Hallway View	Handover, Hallway View



XNV-8080R
5MP IR Vandal Dome Camera



XNV-8080RSA
5MP Stainless IR Vandal Dome Camera



XNV-8020R/8030R/8040R
5MP IR Vandal Dome Camera



XNF-9010RV/9010RVM
12MP IR Fisheye Camera

Imaging Device	1/1.8" CMOS	1/1.8" CMOS	1/1.8" CMOS	1/2.3" 12MP CMOS
Resolution / Max. Frame Rate	5MP / 30fps	5MP / 30fps	5MP / 30fps	3008 x 3008 / 30fps
Min. Illumination	Color: 0.07Lux (F1.3) B/W: 0Lux (IR LED on)	Color: 0.07Lux (F1.3) B/W: 0Lux (IR LED on)	Color: 0.16Lux (F1.6) B/W: 0Lux (IR LED on)	Color: 0.39 Lux (F2.2) BW: 0Lux (IR LED on)
Video Output	CVBS 1.0 Vp-p, Micro USB type B	CVBS 1.0 Vp-p, Micro USB type B	CVBS 1.0 Vp-p, Micro USB type B	CVBS: 1.0 Vp-p, Micro USB Type B
Focal Length	3.9~9.4mm (2.4x) motorized varifocal	3.9~9.4mm (2.4x) motorized varifocal	3.7mm fixed (XNV-8020R) 4.6mm fixed (XNV-8030R) 7.0mm fixed (XNV-8040R)	1.08mm fixed focal
Angular Field of View	H: 92.1° (Wide) ~ 38.7° (Tele) V: 67.2° (Wide) ~ 29° (Tele) D: 119.9° (Wide) ~ 48.6° (Tele)	H: 92.1° (Wide) ~ 38.7° (Tele) V: 67.2° (Wide) ~ 29° (Tele) D: 119.9° (Wide) ~ 48.6° (Tele)	H: 97.5° / V: 71.9° / D: 126.2° (XNV-8020R) H: 77.9° / V: 57.9° / D: 98.7° (XNV-8030R) H: 50.7° / V: 37.8° / D: 63.8° (XNV-8040R)	H: 187° / V: 187° / D: 187°
Pan / Tilt / Rotate	0° ~ 354° / 0° ~ 67° / 0° ~ 355°	0° ~ 354° / 0° ~ 67° / 0° ~ 355°	0° ~ 354° / 0° ~ 67° / 0° ~ 355°	-
IR Viewable Length	50m (164.04ft)	50m (164.04ft)	30m (98.43ft)	10m (32.8ft), Wise IR
Day & Night	Auto (ICR)	Auto (ICR)	Auto (ICR)	Auto (ICR)
Wide Dynamic Range	120dB	120dB	120dB	extremeWDR (120dB)
Digital Noise Reduction	SSNR V	SSNR V	SSNR V	SSNR V
Digital Image Stabilization	Support	Support	Support (Built-in Gyro sensor)	-
Analytics	Intelligent analytics Audio detection Sound classification	Intelligent analytics Audio detection Sound classification	Intelligent analytics Audio detection Sound classification	Intelligent analytics Audio detection Sound classification
Business Intelligence	-	-	People counting, Queue management, Heatmap	People counting, Queue management, Heatmap
Alarm I/O	1 / 1	1 / 1	1 / 1	2 configured I / O
Audio I/O	Selectable (mic in/line in) / Line out	Selectable (mic in/line in) / Line out	Selectable (mic in/line in) / Line out	Selectable (mic in/line in), Built-in mic / Line out
Video Compression	H.265 / H.264, MJPEG	H.265 / H.264, MJPEG	H.265 / H.264, MJPEG	H.265 / H.264, MJPEG
WiseStream	WiseStream II	WiseStream II	WiseStream II	WiseStream II
Streaming	Up to 10 Profiles	Up to 10 Profiles	Up to 10 Profiles	Up to 10 Profiles
Edge Storage	micro SD/SDHC/SDXC	micro SD/SDHC/SDXC	micro SD/SDHC/SDXC	micro SD/SDHC/SDXC
Application Programming Interface	ONVIF profile S/G/T, SUNAPI, Wisenet open platform	ONVIF profile S/G, SUNAPI Wisenet open platform	ONVIF profile S/G, SUNAPI Wisenet open platform	ONVIF Profile S/G/T SUNAPI (HTTP API) Wisenet open platform
Operating Temperature	-40°C ~ +55°C (-40°F ~ +131°F)	-40°C ~ +55°C (-40°F ~ +131°F)	-30°C ~ +55°C (-22°F ~ +131°F)	-40°C ~ +60°C (-40°F ~ +140°F) / 0~95% RH
Certification	IP67, IP66, NEMA4X, IK10	IP66, NEMA4X, IP6K9K, IK10+	IP66, IP67, IK10	IP66, IK10, NEMA4X, EN50155 class T3 (XNF-9010RVM only)
Power Consumption	PoE: Max 12.95W 12VDC: Max 11.5W 24VAC: Max 14W	PoE: Max 12.95W 12VDC: Max 11.5W 24VAC: Max 14W	PoE: Max 9W 12VDC: Max 8W	PoE: Max 12.95W, typical 11W 12VDC: Max 11W, typical 9.1W
Dimensions (WxHxD) / Weight	Ø160 x 118.5mm (Ø6.3" x 4.67") 1.01kg (2.23lb)	Ø160 X 120.5mm (Ø6.38" x 4.74") 2.8kg (6.17lb)	Ø120 x 97.5mm (Ø4.72" x 3.84") 615g (1.36lb)	Ø160 x 72mm (Ø6.38" x 2.83") 1.1kg (2.43lb)
Additional Features	Handover, Hallway View	Handover, Hallway View	Handover, Hallway View	Various mode support (Original, Double panorama, Single panorama, Quad view) M12 Connector (XNF-9010RVM)



XNF-9010RS
12MP Stainless IR Fisheye Camera



XNF-8010R/8010RV/8010RVM
6MP IR Fisheye Camera



XNB-6005
2MP Box Camera (extraLUX)



XNB-6000
2MP Box Camera

Imaging Device	1/2.3" 12MP CMOS	1/1.8" CMOS	1/2" CMOS	1/2.8" CMOS
Resolution / Max. Frame Rate	3008 x 3008 / 30fps	2048 x 2048 / 30fps	2MP / 60fps	2MP / 60fps
Min. Illumination	Color: 0.39 Lux (F2.2, 1/30sec) B/W: 0Lux (IR LED on)	Color: 0.1 Lux (F1.6) B/W: 0Lux (IR LED on)	Color: 0.006 Lux (F1.2) B/W: 0.0006 Lux (F1.2)	Color: 0.01 Lux (F1.2) B/W: 0.001 Lux (F1.2)
Video Output	CVBS: 1.0Vp-p, Micro USB Type B	CVBS 1.0Vp-p, Micro USB type B	CVBS 1.0Vp-p, Micro USB type B	CVBS 1.0Vpp, Micro USB type B
Focal Length	1.08mm fixed focal	1.6mm fixed	-	-
Angular Field of View	H: 187° / V: 187° / D: 187°	H: 192° / V: 192° / D: 192°	-	-
Pan / Tilt / Rotate	-	-	-	-
IR Viewable Length	9m (29.53ft), Wise IR	15m (49.21ft)	-	-
Day & Night	Auto (ICR)	Auto (ICR)	Auto (ICR)	Auto (ICR)
Wide Dynamic Range	extremeWDR (120dB)	120dB	150dB	150dB
Digital Noise Reduction	SSNR V	SSNR V	SSNR V	SSNR V
Digital Image Stabilization	-	-	Support (Built-in Gyro sensor)	Support (Built-in Gyro sensor)
Analytics	Intelligent analytics Audio detection Sound classification	Intelligent analytics Audio detection Sound classification	Intelligent analytics Audio detection Sound classification	Intelligent analytics Audio detection Sound classification
Business Intelligence	People counting, Queue management, Heatmap	People counting, Queue management, Heatmap	-	-
Alarm I/O	2 configured I/O	1 / 1	1 / 1	1 / 1
Audio I/O	Selectable (mic in/line in) / Line out	Selectable (mic in/line in), Built-in mic / Line out	Selectable (mic in/line in), Built-in mic / Line out	Selectable (mic in/line in), Built-in mic / Line out
Video Compression	H.265 / H.264, MJPEG	H.265 / H.264, MJPEG	H.265 / H.264, MJPEG	H.265 / H.264, MJPEG
WiseStream	WiseStream II	WiseStream II	WiseStream II	WiseStream II
Streaming	Up to 10 Profiles	Up to 10 Profiles	Up to 10 Profiles	Up to 10 Profiles
Edge Storage	micro SD/SDHC/SDXC	micro SD/SDHC/SDXC	SD/SDHC/SDXC	SD/SDHC/SDXC
Application Programming Interface	ONVIF Profile S/G/T SUNAPI (HTTP API) Wisenet open platform	ONVIF profile S/G/T, SUNAPI, Wisenet open platform	ONVIF profile S/G, SUNAPI, Wisenet open platform	ONVIF profile S/G, SUNAPI, Wisenet open platform
Operating Temperature	-40°C ~ +50°C (-40°F ~ +122°F) / 0~95% RH	-10°C ~ +55°C (+14°F ~ +131°F) (XNF-8010R) -40°C ~ +55°C (-40°F ~ +131°F) (XNF-8010RV/8010RVM)	-10°C ~ +55°C (+14°F ~ +131°F)	-10°C ~ +55°C (+14°F ~ +131°F)
Certification	IP66, IP67, IP6K9K, NEMA4X, IK10, IK10+ (it can resist impacts of 40 joules), NSF/ANSI Standard 169 - Special Purpose Food Equipment and Devices.	IP66, IK10 (XNF-8010RV/8010RVM)	-	-
Power Consumption	PoE: Max 12.95W, typical 11W 12VDC: Max 11W, typical 9.1W	PoE: Max 12W, 12VDC: Max 11W (XNF-8010R) PoE: Max 12.95W, 12VDC: Max 12W (XNF-8010RV/8010RVM)	PoE: Max 8.5W 12VDC: Max 8W 24VAC: Max 9W	PoE: Max 7.5W 12VDC: Max 6.5W 24VAC: Max 8W
Dimensions (WxHxD) / Weight	Ø167.9 x 72.1mm (Ø66.1" x 28.38") 2.98kg (6.57lb)	Ø146 x 54.8mm (Ø5.75" x 2.16") 730g (1.61lb) (XNF-8010R) Ø146 x 65.8mm (Ø5.75" x 2.59") 785g (1.73lb) (XNF-8010RV) 790g (1.74lb) (XNF-8010RVM)	W 73.1 x H 66.6 x D 147.8mm (2.88" x 2.62" x 5.82") 420g (0.93lb)	W 73.1 x H 66.6 x D 147.8mm (2.88" x 2.62" x 5.82") 420g (0.93lb)
Additional Features	Various mode support (Original, Double panorama, Single panorama, Quad view)	M12 Connector (XNF-8010RVM), Built-in MIC, On board dewarpping	Handover, Hallway View	Handover, Hallway View



XNB-6001
2MP Remote Head Camera



SLA-T4680/T4680V
2MP lens for XNB-6001



SLA-T2480/T2480V
2MP lens for XNB-6001



SLA-T1080F
2MP lens for XNB-6001

Imaging Device	-	1/2.8" CMOS	1/2.8" CMOS	1/2.8" CMOS
Resolution / Max. Frame Rate	2MP / 60fps	-	-	-
Min. Illumination	-	Color : 0.06Lux (F2.5) B/W : 0.06Lux (F2.5)	Color : 0.45Lux (F2.0) B/W : 0.45Lux (F2.0)	Color : 0.03Lux (F1.6)
Video Output	CVBS 1.0Vp-p, Micro USB type B	-	-	-
Focal Length	-	4.6mm Pinhole	2.4mm fixed	1.6mm fisheye
Angular Field of View	-	H: 73° / V: 39° / D: 85°	H: 138° / V: 73° / D: 168°	H: 187° / V: 113.9°
Pan / Tilt / Rotate	-	-	-	-
IR Viewable Length	-	-	-	-
Day & Night	-	Auto (Electrical)	Auto (Electrical)	Auto (Electrical)
Wide Dynamic Range	120dB	-	-	-
Digital Noise Reduction	SSNR V	-	-	-
Digital Image Stabilization	Support	-	-	-
Analytics	Intelligent analytics Audio detection	-	-	-
Business Intelligence	People counting, Queue management, Heatmap	-	-	-
Alarm I/O	1 / 1	-	-	-
Audio I/O	Selectable (mic in/line in) / Line out	-	-	-
Video Compression	H.265 / H.264, MJPEG	-	-	-
WiseStream	WiseStream II	-	-	-
Streaming	Up to 10 Profiles	-	-	-
Edge Storage	SD/SDHC/SDXC	-	-	-
Application Programming Interface	ONVIF profile S/G, SUNAPI, Wisenet open platform	-	-	-
Operating Temperature	-10°C ~ +55°C (+14°F ~ +131°F)	-10°C ~ +55°C (+14°F ~ +131°F)	-10°C ~ +55°C (+14°F ~ +131°F)	-10°C ~ +55°C (+14°F ~ +131°F)
Certification	-	-	-	-
Power Consumption	PoE: Max 6W 12VDC: Max 6.5W	-	-	-
Dimensions (WxHxD) / Weight	W 131.1 x H 28 x D 86mm (5.16" x 1.1" x 3.39") 245g (0.54lb)	Ø24 x 42mm (Ø0.94" x 1.65") (Lens) 8m (314.96") (Cable) 310g (0.68lb) (SLA-T4680) 30 x 20.2 x 45mm (1.18" x 0.8" x 1.77") (Lens) 8m (314.96") (Cable) 321g (0.71lb) (SLA-T4680V)	Ø24 x 49.8mm (Ø0.94" x 1.96") (Lens) 8m (314.96") (Cable) 318g (0.70lb) (SLA-T2480) 30 x 27.9 x 45mm (1.18" x 0.1" x 1.77") (Lens) 8m (314.96") (Cable) 328g (0.72lb) (SLA-T2480V)	Ø35 x 68.9mm (Ø1.38" x 2.71") (Lens) 8m (314.96") (Cable) 321g (0.71lb)
Additional Features	Handover, Hallway View	-	-	-



XNO-6120R
2MP IR Bullet Camera



XNO-6085R
2MP IR Bullet Camera (extraLUX)



XNO-6080R
2MP IR Bullet Camera



XNO-L6080R
2MP IR Bullet Camera



XNO-6010R/6020R
2MP IR Bullet Camera

	XNO-6120R 2MP IR Bullet Camera	XNO-6085R 2MP IR Bullet Camera (extraLUX)	XNO-6080R 2MP IR Bullet Camera	XNO-L6080R 2MP IR Bullet Camera	XNO-6010R/6020R 2MP IR Bullet Camera
Imaging Device	1/2.8" CMOS	1/2" CMOS	1/2.8" CMOS	1/2.8" CMOS	1/2.8" CMOS
Resolution / Max. Frame Rate	2MP / 60fps	2MP / 60fps	2MP / 60fps	2MP / 60fps	2MP / 60fps
Min. Illumination	Color : 0.03Lux (F1.6) B/W : 0Lux (IR LED on)	Color : 0.004Lux (F0.94) B/W : 0Lux (IR LED on)	Color : 0.015Lux (F1.4) B/W : 0Lux (IR LED on)	Color : 0.03lux (F1.6) B/W : 0Lux (IR LED on)	Color : 0.055lux (F2.0) (XNO-6010R) Color : 0.015lux (F1.4) (XNO-6020R) B/W : 0Lux (IR LED On)
Video Output	CVBS 1.0Vp-p, Micro USB type B	CVBS 1.0Vp-p, Micro USB type B	CVBS 1.0Vp-p, Micro USB type B	CVBS 1.0Vp-p, Micro USB type B	CVBS 1.0Vp-p, Micro USB type B
Focal Length	5.2 ~ 62.4mm (Optical 12x)	4.1 ~ 16.4mm (Optical 4x) motorized varifocal	2.8 ~ 12mm (4.3x) motorized varifocal	3.2 ~ 10mm (3.1x) motorized varifocal	2.4mm fixed (XNO-6010R) 4mm fixed (XNO-6020R)
Angular Field of View	H : 54.58° (Wide) ~ 5.3° (Tele) V : 32.19° (Wide) ~ 3° (Tele) D : 61.4° (Wide) ~ 6.06° (Tele)	H : 100° (Wide) ~ 26.2° (Tele) V : 54° (Wide) ~ 14.8° (Tele) D : 116° (Wide) ~ 30° (Tele)	H : 119.5° (Wide) ~ 27.9° (Tele) V : 62.8° (Wide) ~ 15.7° (Tele) D : 142.1° (Wide) ~ 32° (Tele)	H : 109° (Wide) ~ 33.2° (Tele) V : 57.4° (Wide) ~ 18.7° (Tele) D : 132° (Wide) ~ 38° (Tele)	H : 139° / V : 73° / D : 167° (XNO-6010R) H : 88.6° / V : 47.5° / D : 104.8° (XNO-6020R)
Pan / Tilt / Rotate	-	-	-	-	-
IR Viewable Length	70m (229.66ft)	70m (229.66ft)	50m (164.04ft)	30m (98.42ft)	20m (65.62ft) (XNO-6010R) 30m (98.43ft) (XNO-6020R)
Day & Night	Auto (ICR)	Auto (ICR)	Auto (ICR)	Auto (ICR)	Auto (ICR)
Wide Dynamic Range	150dB	150dB	150dB	120dB	150dB
Digital Noise Reduction	SSNR V	SSNR V	SSNR V	SSNR V	SSNR V
Digital Image Stabilization	Support	Support	Support	Support	Support
Analytics	Intelligent analytics Audio detection Sound classification	Intelligent analytics Audio detection Sound classification	Intelligent analytics Audio detection Sound classification	Intelligent analytics	Intelligent analytics Audio detection Sound classification
Business Intelligence	-	-	-	-	People counting, Queue management, Heatmap
Alarm I/O	1 / 1	1 / 1	1 / 1	-	1 / 1
Audio I/O	Selectable (mic in/line in) / Line out	Selectable (mic in/line in) / Line out	Selectable (mic in/line in) / Line out	-	Selectable (mic in/line in) / Line out
Video Compression	H.265 / H.264, MJPEG	H.265 / H.264, MJPEG	H.265 / H.264, MJPEG	H.265 / H.264, MJPEG	H.265 / H.264, MJPEG
WiseStream	WiseStream II	WiseStream II	WiseStream II	WiseStream II	WiseStream II
Streaming	Up to 10 Profiles	Up to 10 Profiles	Up to 10 Profiles	Up to 5 Profiles	Up to 10 Profiles
Edge Storage	micro SD/SDHC/SDXC	micro SD/SDHC/SDXC	micro SD/SDHC/SDXC	micro SD/SDHC/SDXC	micro SD/SDHC/SDXC
Application Programming Interface	ONVIF profile S/G, SUNAPI, Wisenet open platform	ONVIF profile S/G, SUNAPI, Wisenet open platform	ONVIF profile S/G/T, SUNAPI, Wisenet open platform	ONVIF profile S/G, SUNAPI, Wisenet open platform	ONVIF profile S/G/T, SUNAPI, Wisenet open platform
Operating Temperature	-40°C ~ +55°C (-40°F ~ +131°F) * Start up above -35°C (-31°F)	-40°C ~ +55°C (-40°F ~ +131°F) * Start up above -35°C (-31°F)	-40°C ~ +55°C (-40°F ~ +131°F)	-40°C ~ +55°C (-40°F ~ +131°F)	-30°C ~ +55°C (-22°F ~ +131°F) * Start up above -20°C
Certification	IP67, IP66, NEMA 4X, IK10	IP67, IP66, NEMA 4X, IK10	IP67, IP66, NEMA 4X, IK10	IP66, IK10	IP67, IP66, NEMA 4X, IK10
Power Consumption	PoE : Max 12.95W 12VDC : Max 12.5W 24VAC : Max 14.5W	PoE : Max 12.95W 12VDC : Max 11.5W 24VAC : Max 12.95W	PoE : Max 12.95W 12VDC : Max 12W 24VAC : Max 15W	PoE : Max. 11W	PoE : Max 9.7W 12VDC : Max 8.8W
Dimensions (WxHxD) / Weight	Ø91 x 368.6mm (Ø3.58" x 14.51") 2.18kg (4.81lb)	Ø91 x 388.6mm (Ø3.58" x 15.3") 2.35kg (5.18lb)	Ø91 x 368.6mm (Ø3.58" x 14.51") 2.18kg (4.81lb)	Ø91 x 322.9mm (Ø3.58" x 12.71") 1.29kg (4.25lb)	Ø70 x 301.5mm (Ø2.76" x 11.87") (XNO-6010R) Ø70 x 296mm (Ø2.76" x 11.65") (XNO-6020R) 1.22kg (2.69lb)
Additional Features	Handover, Hallway View	Handover, Hallway View	Handover, Hallway View	Handover, Hallway View	Handover, Hallway View



XND-6085/6085V
2MP Dome Camera (extraLUX)



XND-6080/6080V
2MP Dome Camera



XND-6080R/6080RV
2MP IR Dome Camera



XND-L6080R/L6080RV
2MP IR Dome Camera



XND-L6080V
2MP Dome Camera

Imaging Device	1/2" CMOS	1/2.8" CMOS	1/2.8" CMOS	1/2.8" CMOS	1/2.8" CMOS
Resolution / Max. Frame Rate	2MP / 60fps	2MP / 60fps	2MP / 60fps	2MP / 60fps	2MP / 60fps
Min. Illumination	Color : 0.004Lux (F0.94) B/W : 0.0004Lux (F0.94)	Color : 0.015Lux (F1.4) B/W : 0.0015Lux (F1.4)	Color : 0.015Lux (F1.4) B/W : 0Lux (IR LED on)	Color : 0.03Lux (F1.6) B/W : 0Lux (IR LED on)	Color : 0.03Lux (F1.6) B/W : 0.01Lux (F1.6)
Video Output	CVBS 1.0Vp-p, Micro USB type B	CVBS 1.0Vp-p, Micro USB type B	CVBS 1.0Vp-p, Micro USB type B	CVBS 1.0Vp-p, Micro USB type B	CVBS 1.0Vp-p, Micro USB type B
Focal Length	4.1~16.4mm (Optical 4x)	2.8~12mm (4.3x) motorized varifocal	2.8~12mm (4.3x) motorized varifocal	3.2~10mm (3.1x) motorized varifocal	3.2~10mm (3.1x) motorized varifocal
Angular Field of View	H : 100° (Wide) ~ 26.2° (Tele) V : 54° (Wide) ~ 14.8° (Tele) D : 116° (Wide) ~ 30° (Tele)	H : 119.5° (Wide) ~ 27.9° (Tele) V : 62.8° (Wide) ~ 15.7° (Tele) D : 142.1° (Wide) ~ 32° (Tele)	H : 119.5° (Wide) ~ 27.9° (Tele) V : 62.8° (Wide) ~ 15.7° (Tele) D : 142.1° (Wide) ~ 32° (Tele)	H : 109° (Wide) ~ 33.2° (Tele) V : 57.4° (Wide) ~ 18.7° (Tele) D : 132° (Wide) ~ 38° (Tele)	H : 109° (Wide) ~ 33.2° (Tele) V : 57.4° (Wide) ~ 18.7° (Tele) D : 132° (Wide) ~ 38° (Tele)
Pan / Tilt / Rotate	± 175° / ± 73° / ± 175°	0° ~ 354° / 0° ~ 67° / 0° ~ 355°	0° ~ 354° / 0° ~ 67° / 0° ~ 355°	0° ~ 354° / 0° ~ 67° / 0° ~ 355°	0° ~ 354° / 0° ~ 67° / 0° ~ 355°
IR Viewable Length	-	-	30m (98.43ft)	30m (98.42ft)	-
Day & Night	Auto (ICR)	Auto (ICR)	Auto (ICR)	Auto (ICR)	Auto (ICR)
Wide Dynamic Range	-	150dB	150dB	120dB	120dB
Digital Noise Reduction	SSNR V	SSNR V	SSNR V	SSNR V	SSNR V
Digital Image Stabilization	Support (Built-in Gyro sensor)	Support	Support	Support	Support
Analytics	Intelligent analytics Audio detection Sound classification	Intelligent analytics Audio detection Sound classification	Intelligent analytics Audio detection Sound classification	Intelligent analytics	Intelligent analytics
Business Intelligence	-	-	-	-	-
Alarm I/O	1 / 1	1 / 1	1 / 1	-	-
Audio I/O	Selectable (mic in/line in) / Line out	Selectable (mic in/line in), Built-in mic / Line out	Selectable (mic in/line in), Built-in mic / Line out	-	-
Video Compression	H.265 / H.264, MJPEG	H.265 / H.264, MJPEG	H.265 / H.264, MJPEG	H.265 / H.264, MJPEG	H.265 / H.264, MJPEG
WiseStream	WiseStream II	WiseStream II	WiseStream II	WiseStream II	WiseStream II
Streaming	Up to 10 Profiles	Up to 10 Profiles	Up to 10 Profiles	Up to 5 Profiles	Up to 5 Profiles
Edge Storage	SD/SDHC/SDXC	micro SD/SDHC/SDXC	micro SD/SDHC/SDXC	micro SD/SDHC/SDXC	micro SD/SDHC/SDXC
Application Programming Interface	ONVIF profile S/G, SUNAPI, Wisenet open platform	ONVIF profile S/G/T, SUNAPI, Wisenet open platform	ONVIF profile S/G/T, SUNAPI, Wisenet open platform	ONVIF profile S/G, SUNAPI, Wisenet open platform	ONVIF profile S/G, SUNAPI, Wisenet open platform
Operating Temperature	-30°C ~ +55°C (-22°F ~ +131°F) * Start up above -10°C (+14°F)	-10°C ~ +55°C (+14°F ~ +131°F)	-10°C ~ +55°C (+14°F ~ +131°F)	-10°C ~ +55°C (+14°F ~ +131°F)	-10°C ~ +55°C (+14°F ~ +131°F)
Certification	IK08	IK08	IK08	IK08	IK08
Power Consumption	PoE : Max 10.2W 12VDC : Max 8.6W	PoE : Max 6.5W 12VDC : Max 6W	PoE : Max 10W 12VDC : Max 9W	PoE : Max 8W	PoE : Max 6W
Dimensions (WxHxD) Weight	Ø 160 x 140mm (Ø 6.3" x 5.51") 1.1 kg (2.43lb) (XND-6085) 1.25 kg (2.76lb) (XND-6085V)	Ø 140.8 x 113mm (Ø 5.54" x 4.45") 610g (1.34lb) (XND-6080) 714g (1.57lb) (XND-6080V)	Ø 140.8 x 113mm (Ø 5.54" x 4.45") 624g (1.38lb) (XND-6080R) 724g (1.60lb) (XND-6080RV)	Ø 140.8 x 113mm (Ø 5.54" x 4.45") 580g (1.28lb) (XND-L6080R) 690g (1.52lb) (XND-L6080RV)	Ø 140.8 x 113mm (Ø 5.54" x 4.45") 675g (1.49lb)
Additional Features	Handover, Hallway View	Handover, Hallway View	Handover, Hallway View	Defog, Hallway View	Defog, Hallway View



XND-6020R
2MP IR Dome Camera



XND-6011F
2MP Flush Mount Dome Camera



XND-6010
2MP Dome Camera



XNV-6120/6120R
2MP Vandal / IR Vandal Dome Camera

Imaging Device	1/2.8" CMOS	1/2.8" CMOS	1/2.8" CMOS	1/2.8" CMOS
Resolution / Max. Frame Rate	2MP / 60fps	2MP / 60fps	2MP / 60fps	2MP / 60fps
Min. Illumination	Color : 0.015 Lux (F1.4) B/W : 0Lux (IR LED on)	Color : 0.055Lux (F2.0) B/W : 0.055Lux (F2.0)	Color : 0.055Lux (F2.0) B/W : 0.055Lux (F2.0)	Color : 0.03Lux (F1.6), B/W : 0.003Lux (F1.6) (XNV-6120) Color : 0.03Lux (F1.6), B/W : 0Lux (IR LED on) (XNV-6120R)
Video Output	CVBS 1.0Vp-p, Micro USB type B	Micro USB type B	CVBS 1.0Vp-p, Micro USB type B	CVBS 1.0Vp-p, Micro USB type B
Focal Length	4mm fixed	2.8mm fixed	2.4mm fixed	5.2~62.4mm (Optical 12x)
Angular Field of View	H : 88.6° / V : 47.5° / D : 104.8°	H : 112° / V : 62° / D : 130°	H : 139° / V : 73° / D : 167°	H : 54.58° (Wide) ~ 5.3° (Tele) V : 32.19° (Wide) ~ 3° (Tele) D : 61.4° (Wide) ~ 6.06° (Tele)
Pan / Tilt / Rotate	0° ~ 354° / 0° ~ 67° / 0° ~ 355°	0° ~ 355° / 0° ~ 47° / 0° ~ 353°	0° ~ 354° / 0° ~ 75° / 0° ~ 355°	0° ~ 354° / 0° ~ 75° / 0° ~ 355°
IR Viewable Length	30m (98.43ft)	-	-	70m (229.66ft) (XNV-6120R)
Day & Night	Auto (ICR)	Auto (Electrical)	Auto (ICR)	Auto (ICR)
Wide Dynamic Range	150dB	-	150dB	150dB
Digital Noise Reduction	SSNR V	SSNR V	SSNR V	SSNR V
Digital Image Stabilization	Support	Support	Support	Support (Built-in Gyro sensor)
Analytics	Intelligent analytics Audio detection Sound classification			
Business Intelligence	People counting, Queue management, Heatmap	People counting, Queue management, Heatmap	People counting, Queue management, Heatmap	-
Alarm I/O	1 / 1	-	1 / 1	1 / 1
Audio I/O	Selectable (mic in/line in), Built-in mic / Line out	Built-in mic / -	Selectable (mic in/line in), Built-in mic / Line out	Selectable (mic in/line in) / Line out
Video Compression	H.265 / H.264, MJPEG			
WiseStream	WiseStream II	WiseStream II	WiseStream II	WiseStream II
Streaming	Up to 10 Profiles			
Edge Storage	SD/SDHC/SDXC	SD/SDHC/SDXC	micro SD/SDHC/SDXC	SD/SDHC/SDXC
Application Programming Interface	ONVIF profile S/G, SUNAPI, Wisenet open platform	ONVIF profile S/G, SUNAPI, Wisenet open platform	ONVIF profile S/G/T, SUNAPI, Wisenet open platform	ONVIF profile S/G/T, SUNAPI, Wisenet open platform
Operating Temperature	-10°C ~ +55°C (+14°F ~ +131°F)	-10°C ~ +55°C (+14°F ~ +131°F)	-10°C ~ +55°C (+14°F ~ +131°F)	-40°C ~ +55°C (-40°F ~ +131°F) * Start up above -35°C (-31°F)
Certification	IK08	-	IK08	IP67, IP66, NEMA 4X, IK10
Power Consumption	PoE : Max 9W 12VDC : Max 8W	PoE : Max 4.7W	PoE : Max 6.5W 12VDC : Max 6W	PoE : Max. 7.8W, 12VDC : Max 7W, 24V AC : Max. 8.2W (XNV-6120) PoE : Max. 12.95W, 12V DC : Max. 11.5W, 24V AC : Max. 14W (XNV-6120R)
Dimensions (WxHxD) / Weight	Ø 110 x 90mm (Ø 4.33" x 3.54") 380g (0.84lb)	Ø 98.9 x 129mm (Ø 3.89" x 5.08") 275g (0.61lb)	Ø 140.8 x 113mm (Ø 5.54" x 4.45") 610g (1.34lb)	Ø 160 x 128.5mm (Ø 6.3" x 5.06") 985g (2.17lb) (XNV-6120) 995g (2.19lb) (XNV-6120R)
Additional Features	Handover, Hallway View	Handover, Hallway View	Handover, Hallway View	Handover, Hallway View



XNV-6085
2MP Vandal Dome Camera (extraLUX)



XNV-6080
2MP Vandal Dome Camera



XNV-6080R
2MP IR Vandal Dome Camera



XNV-6080RSA
2MP Stainless IR Vandal Dome Camera



XNV-L6080
2MP Vandal Dome Camera

Imaging Device	1/2" CMOS	1/2.8" CMOS	1/2.8" CMOS	1/2.8" CMOS	1/2.8" CMOS
Resolution / Max. Frame Rate	2MP / 60fps	2MP / 60fps	2MP / 60fps	2MP / 60fps	2MP / 60fps
Min. Illumination	Color : 0.004Lux (F0.94) B/W : 0.0004Lux (F0.94)	Color : 0.015Lux (F1.4) B/W : 0.015Lux (F1.4)	Color : 0.015Lux (F1.4) B/W : 0Lux (IR LED on)	Color : 0.015Lux (F1.4) B/W : 0Lux (IR LED on)	Color : 0.03Lux (F1.6) B/W : 0.01Lux (F1.6)
Video Output	CVBS 1.0Vp-p, Micro USB type B	CVBS 1.0Vp-p, Micro USB type B	CVBS 1.0Vp-p, Micro USB type B	CVBS 1.0Vp-p, Micro USB type B	CVBS 1.0Vp-p, Micro USB type B
Focal Length	4.1 ~ 16.4mm (Optical 4x)	2.8 ~ 12mm (4.3x) motorized varifocal	2.8 ~ 12mm (4.3x) motorized varifocal	2.8 ~ 12mm (4.3x) motorized varifocal	3.2 ~ 10mm (3.1x) motorized varifocal
Angular Field of View	H: 100° (Wide) ~ 26.2° (Tele) V: 54° (Wide) ~ 14.8° (Tele) D: 116° (Wide) ~ 30° (Tele)	H: 119.5° (Wide) ~ 27.9° (Tele) V: 62.8° (Wide) ~ 15.7° (Tele) D: 142.1° (Wide) ~ 32° (Tele)	H: 119.5° (Wide) ~ 27.9° (Tele) V: 62.8° (Wide) ~ 15.7° (Tele) D: 142.1° (Wide) ~ 32° (Tele)	H: 119.5° (Wide) ~ 27.9° (Tele) V: 62.8° (Wide) ~ 15.7° (Tele) D: 142.1° (Wide) ~ 32° (Tele)	H: 109° (Wide) ~ 33.2° (Tele) V: 57.4° (Wide) ~ 18.7° (Tele) D: 132° (Wide) ~ 38° (Tele)
Pan / Tilt / Rotate	± 175° / ± 73° / ± 175°	0° ~ 354° / 0° ~ 67° / 0° ~ 355°	0° ~ 354° / 0° ~ 67° / 0° ~ 355°	0° ~ 354° / 0° ~ 67° / 0° ~ 355°	0° ~ 354° / 0° ~ 67° / 0° ~ 355°
IR Viewable Length	-	-	50m (164.04ft)	50m (164.04ft)	-
Day & Night	Auto (ICR)	Auto (ICR)	Auto (ICR)	Auto (ICR)	Auto (ICR)
Wide Dynamic Range	150dB	150dB	150dB	150dB	120dB
Digital Noise Reduction	SSNR V	SSNR V	SSNR V	SSNR V	SSNR V
Digital Image Stabilization	Support (Built-in Gyro sensor)	Support	Support	Support	Support
Analytics	Intelligent analytics Audio detection Sound classification	Intelligent analytics Audio detection, Sound classification	Intelligent analytics Audio detection, Sound classification	Intelligent analytics Audio detection, Sound classification	Intelligent analytics
Business Intelligence	-	-	-	-	-
Alarm I/O	1 / 1	1 / 1	1 / 1	1 / 1	-
Audio I/O	Selectable (mic in/line in) / Line out	Selectable (mic in/line in) / Line out	Selectable (mic in/line in) / Line out	Selectable (mic in/line in) / Line out	-
Video Compression	H.265 / H.264, MJPEG	H.265 / H.264, MJPEG	H.265 / H.264, MJPEG	H.265 / H.264, MJPEG	H.265 / H.264, MJPEG
WiseStream	WiseStream II	WiseStream II	WiseStream II	WiseStream II	WiseStream II
Streaming	Up to 10 Profiles	Up to 10 Profiles	Up to 10 Profiles	Up to 10 Profiles	Up to 5 Profiles
Edge Storage	micro SD/SDHC/SDXC	micro SD/SDHC/SDXC	micro SD/SDHC/SDXC	micro SD/SDHC/SDXC	micro SD/SDHC/SDXC
Application Programming Interface	ONVIF profile S/G, SUNAPI, Wisenet open platform	ONVIF profile S/G/T, SUNAPI, Wisenet open platform	ONVIF profile S/G/T, SUNAPI, Wisenet open platform	ONVIF profile S/G, SUNAPI, Wisenet open platform	ONVIF profile S/G, SUNAPI, Wisenet open platform
Operating Temperature	-40°C ~ +55°C (-40°F ~ +131°F) * Start up above -35°C (-31°F)	-40°C ~ +55°C (-40°F ~ +131°F)	-40°C ~ +55°C (-40°F ~ +131°F)	-40°C ~ +55°C (-40°F ~ +131°F)	-40°C ~ +55°C (-40°F ~ +131°F)
Certification	IP67, IP66, NEMA 4X, IK10	IP67, IP66, NEMA 4X, IK10	IP67/IP66/NEMA4X, IK10	IP66, NEMA4X, IP6K9K, IK10+	IP66, IK10
Power Consumption	PoE : Max 12.1W 12VDC : Max 11.1W 24VAC : Max 13.5W	PoE : Max 7.8W 12VDC : Max 7W 24VAC : Max 8.2W	PoE : Max 12.95W 12VDC : Max 11.5W 24VAC : Max 14W	PoE : Max 12.95W 12VDC : Max 11.5W 24VAC : Max 14W	PoE : Max 8W
Dimensions (WxHxD) / Weight	Ø160 x 140mm (Ø6.3" x 5.51") 1.4kg (3.09lb)	Ø160 x 118.5mm (Ø6.3" x 4.67") 985g (2.17lb)	Ø160 x 118.5mm (Ø6.3" x 4.67") 995g (2.19lb)	Ø160 x 120.5mm (Ø6.38" x 4.74") 2.8kg (6.17lb)	Ø160 x 118.5mm (Ø6.3" x 4.67") 940g (2.1lb)
Additional Features	Handover, Hallway View	Handover, Hallway View	Handover, Hallway View	Handover, Hallway View	Handover, Hallway View



XNV-L6080R
2MP IR Vandal Dome Camera



XNV-6022R/6022RM
2MP Mobile IR Flat Camera



XNV-6020R
2MP IR Vandal Dome Camera



XNV-6013M
2MP Mobile Camera



XNV-6012M/6012
2MP Mobile Flat Camera

Imaging Device	1/2.8" CMOS	1/2.8" CMOS	1/2.8" CMOS	1/2.8" CMOS	1/2.8" CMOS
Resolution / Max. Frame Rate	2MP / 60fps	2MP / 60fps	2MP / 60fps	2MP / 60fps	2MP / 60fps
Min. Illumination	Color : 0.03Lux (F1.6) B/W : 0Lux (IR LED on)	Color : 0.04Lux (F2.0) B/W : 0Lux (IR LED on)	Color : 0.015Lux (F1.4) B/W : 0Lux (IR LED on)	Color : 0.04Lux (F2.0) B/W : 0.04Lux (F2.0)	Color : 0.04Lux (F2.0) B/W : 0.04Lux (F2.0)
Video Output	CVBS 1.0Vp-p, Micro USB type B	Micro USB Type B	CVBS 1.0Vp-p, Micro USB type B	Micro USB Type B	Micro USB type B
Focal Length	3.2 ~ 10mm (3.1x) motorized varifocal	3.6mm fixed	4mm fixed	2.8mm fixed	2.4mm fixed
Angular Field of View	H : 109° (Wide) ~ 33.2° (Tele) V : 57.4° (Wide) ~ 18.7° (Tele) D : 132° (Wide) ~ 38° (Tele)	H : 94.8° / V : 49.3° / D : 114.3°	H : 88.6° / V : 47.5° / D : 104.8°	H : 107.4° / V : 62.2° / D : 122°	H : 135.4° / V : 71.2° / D : 161.6°
Pan / Tilt / Rotate	0° ~ 354° / 0° ~ 67° / 0° ~ 355°	±5° / 0° ~ 67° / ±90°	0° ~ 354° / 0° ~ 67° / 0° ~ 355°	±5° / ±10° / ±90°	±5° / 0° ~ 67° / ±90°
IR Viewable Length	30m (98.43ft)	15m (49.21ft)	30m (98.43ft)	-	-
Day & Night	Auto (ICR)	Auto (ICR)	Auto (ICR)	Auto (Electrical)	Auto (Electrical)
Wide Dynamic Range	120dB	150dB	150dB	150dB	150dB
Digital Noise Reduction	SSNR V	SSNR V	SSNR V	SSNR V	SSNR V
Digital Image Stabilization	Support	Support (Built-in Gyro sensor)	Support	Support (Built-in Gyro sensor)	Support (Built-in Gyro sensor)
Analytics	Intelligent analytics	Intelligent analytics Audio detection Sound classification (w/ external MIC)	Intelligent analytics Audio detection Sound classification	Intelligent analytics Audio detection Sound classification	Intelligent analytics Audio detection Sound classification (w/ external MIC)
Business Intelligence	-	-	People counting, Queue management, Heatmap	-	-
Alarm I/O	-	-	1 / 1	-	-
Audio I/O	-	Selectable (mic in/line in), Built-in mic / Line out	Selectable (mic in/line in) / Line out	Selectable (mic in/line in) / Line out	Selectable (mic in/line in), Built-in mic / Line out
Video Compression	H.265 / H.264, MJPEG	H.265 / H.264, MJPEG	H.265 / H.264, MJPEG	H.265 / H.264, MJPEG	H.265 / H.264, MJPEG
WiseStream	WiseStream II	WiseStream II	WiseStream II	WiseStream II	WiseStream II
Streaming	Up to 5 Profiles	Up to 10 Profiles	Up to 10 Profiles	Up to 10 Profiles	Up to 10 Profiles
Edge Storage	micro SD/SDHC/SDXC	micro SD/SDHC/SDXC	micro SD/SDHC/SDXC	micro SD/SDHC/SDXC	micro SD/SDHC/SDXC
Application Programming Interface	ONVIF profile S/G, SUNAPI, Wisenet open platform	ONVIF profile S/G, SUNAPI, Wisenet open platform	ONVIF profile S/G, SUNAPI, Wisenet open platform	ONVIF profile S/G, SUNAPI, Wisenet open platform	ONVIF profile S/G, SUNAPI, Wisenet open platform
Operating Temperature	-40°C ~ +55°C (-40°F ~ +131°F)	-30°C ~ +55°C (-22°F ~ +131°F) * Start up above -20°C (-4°F)	-30°C ~ +55°C (-22°F ~ +131°F) * Start up above -20°C (-4°F)	-40°C ~ +60°C (-40°F ~ +140°F) * Start up above -30°C (-22°F)	-30°C ~ +55°C (-22°F ~ +131°F) * Start up above -20°C (-4°F)
Certification	IP66, IK10	IP66, IK10, NEMA4X	IP67, IP66, IK10	IP67, IP6K9K, IK10, NEMA4X	IP66, IK10, NEMA4X
Power Consumption	PoE : Max 11W	PoE : Max 6.7W	PoE : Max 9W 12V DC : Max 8W	PoE : Max 7.2W	PoE : Max 6.5W
Dimensions (WxHxD) / Weight	Ø 160 x 118.5mm (Ø 6.3" x 4.67") 940g (2.07lb)	W 98.9 x H 52 x D 100mm (3.89" x 2.05" x 3.94") 295g (0.65lb)	Ø 120 x 97.5mm (Ø 4.72" x 3.84") 615g (1.36lb)	W 103.7 x H 72.3 x D 126.8mm (4.08" x 2.85" x 4.99") 478g (1.04lb)	W 98.9 x H 52 x D 100mm (3.89" x 2.05" x 3.94") 295g (0.65lb)
Additional Features	Handover, Hallway View	M12 Connector (XNV-6022RM) Handover, Hallway View	Handover, Hallway View	M12 Connector Handover, Hallway View	M12 Connector (XNV-6012M) Handover, Hallway View



XNV-6011
2MP Vandal Dome Camera



XNV-6010
2MP Vandal Dome Camera

PTZ PLUS



XNP-9300RW
4K 30x Wiper + IR PTZ Camera

PTZ PLUS



XNP-8300RW
6MP 30x Wiper + IR PTZ Camera

PTZ PLUS



XNP-6400RW
2MP 40x Wiper + IR PTZ Camera

Imaging Device	1/2.8" CMOS	1/2.8" CMOS	1/2.8" CMOS	1/2.8" CMOS	1/2.8" CMOS
Resolution / Max. Frame Rate	2MP / 60fps	2MP / 60fps	8MP / 30fps	6MP / 30fps	2MP / 60fps
Min. Illumination	Color: 0.055Lux (F2.0) B/W: 0.055Lux (F2.0)	Color: 0.055Lux (F2.0) B/W: 0.0055Lux (F2.0)	Color: 0.1Lux (F1.6, 1/30sec) BW: 0Lux (IR LED On)	Color: 0.1Lux (F1.6, 1/30sec) BW: 0Lux (IR LED On)	Color: 0.05Lux (F1.6, 1/30sec) BW: 0Lux (IR LED On)
Video Output	CVBS 1.0Vp-p, Micro USB type B	CVBS 1.0Vpp, Micro USB type B	-	-	-
Focal Length	2.8mm fixed	2.4mm fixed	5~150mm (30x) zoom	5~150mm (30x) zoom	4.25~170mm (40x) zoom
Angular Field of View	H: 112° / V: 62° / D: 130°	H: 139° / V: 73° / D: 167°	H: 57.42° (Wide) ~ 2.19° (Tele) V: 33.54° (Wide) ~ 1.25° (Tele)	H: 57.42° (Wide) ~ 2.19° (Tele) V: 33.54° (Wide) ~ 1.25° (Tele)	H: 65.66° (Wide) ~ 1.88° (Tele) V: 39.4° (Wide) ~ 1.09° (Tele)
Pan / Tilt / Rotate	0° ~ 353° / 0° ~ 59° / 0° ~ 353°	0° ~ 354° / 0° ~ 67° / 0° ~ 355°	360° Endless / 110° (-20° ~ 90°) / -	360° Endless / 110° (-20° ~ 90°) / -	360° Endless / 110° (-20° ~ 90°) / -
IR Viewable Length	-	-	200m (656.17ft), Wise IR	200m (656.17ft), Wise IR	200m (656.17ft), Wise IR
Day & Night	Auto (Electrical)	Auto (ICR)	Auto (ICR)	Auto (ICR)	Auto (ICR)
Wide Dynamic Range	150dB	150dB	extremeWDR (120dB)	extremeWDR (120dB)	extremeWDR (150dB)
Digital Noise Reduction	SSNR V	SSNR V	SSNR V	SSNR V	SSNR V
Digital Image Stabilization	Support	Support	Support (built-in gyro sensor)	Support (built-in gyro sensor)	Support (built-in gyro sensor)
Analytics	Intelligent analytics	Intelligent analytics Audio detection Sound classification	Intelligent analytics *Audio detection, Sound classification (with NWI/O Box: SPM-4210)	Intelligent analytics *Audio detection, Sound classification (with NWI/O Box: SPM-4210)	Intelligent analytics *Audio detection, Sound classification (with NWI/O Box: SPM-4210)
Business Intelligence	People counting, Queue management, Heatmap	People counting, Queue management, Heatmap	-	-	-
Alarm I/O	-	1 / 1	Compatible with NWI/O Box (Optional)	Compatible with NWI/O Box (Optional)	Compatible with NWI/O Box (Optional)
Audio I/O	-	Selectable (mic in/line in) / Line out	Compatible with NWI/O Box (Optional)	Compatible with NWI/O Box (Optional)	Compatible with NWI/O Box (Optional)
Video Compression	H.265 / H.264, MJPEG	H.265 / H.264, MJPEG	H.265 / H.264, MJPEG	H.265 / H.264, MJPEG	H.265 / H.264, MJPEG
WiseStream	WiseStream II	WiseStream II	WiseStream II	WiseStream II	WiseStream II
Streaming	Up to 10 Profiles	Up to 10 Profiles	Up to 10 profiles	Up to 10 profiles	Up to 10 profiles
Edge Storage	micro SD/SDHC/SDXC	micro SD/SDHC/SDXC	micro SD/SDHC/SDXC	micro SD/SDHC/SDXC	micro SD/SDHC/SDXC
Application Programming Interface	ONVIF profile S/G, SUNAPI, Wisenet open platform	ONVIF profile S/G, SUNAPI, Wisenet open platform	ONVIF profile S/G, SUNAPI, Wisenet open platform	ONVIF profile S/G, SUNAPI, Wisenet open platform	ONVIF profile S/G, SUNAPI, Wisenet open platform
Operating Temperature	-30°C ~ +55°C (-22°F ~ +131°F) * Start up above -20°C (-4°F)	-30°C ~ +55°C (-22°F ~ +131°F) * Start up above -20°C (-4°F)	Normal: -40°C ~ +55°C (-40°F ~ +131°F) / Maximum Temperature based on NEMA-TS 2(2.2.7): +74°C (+165°F) * Start up should be done at above -30°C 0~95% RH (Non-condensing)	Normal: -40°C ~ +55°C (-40°F ~ +131°F) / Maximum Temperature based on NEMA-TS 2(2.2.7): +74°C (+165°F) * Start up should be done at above -30°C 0~95% RH (Non-condensing)	Normal: -40°C ~ +55°C (-40°F ~ +131°F) / Maximum Temperature based on NEMA-TS 2(2.2.7): +74°C (+165°F) * Start up should be done at above -30°C 0~95% RH (Non-condensing)
Certification	IP66, IK10, NEMA4X	IP67, IP66, IK10	IP66, IK10, NEMA4X, NEMA-TS 2 (2.2.8, 2.2.9)	IP66, IK10, NEMA4X, NEMA-TS 2 (2.2.8, 2.2.9)	IP66, IK10, NEMA4X, NEMA-TS 2 (2.2.8, 2.2.9)
Power Consumption	PoE: Max 6.5W	PoE: Max 6W 12V DC: Max 5.5W	HPoE (Camera only): Max 42W, typical 20W	HPoE (Camera only): Max 42W, typical 20W	HPoE (Camera only): Max 42W, typical 20W
Dimensions (WxHxD) / Weight	Ø 112.8 x 63.7mm (Ø 4.44" x 2.51") 420g (0.93lb)	Ø 120 x 97.5mm (Ø 4.72" x 3.84") 625g (1.38lb)	Ø 184.9 x 318.8mm (Ø 7.28" x 12.55") 5.4kg (11.9lb)	Ø 184.9 x 318.8mm (Ø 7.28" x 12.55") 5.4kg (11.9lb)	Ø 184.9 x 318.8mm (Ø 7.28" x 12.55") 5.4kg (11.9lb)
Additional Features	Handover, Hallway View	Handover, Hallway View	1 Terminal & Cable, Upgraded preset accuracy, Built-in wiper, Object auto tracking (Based on AI engine), Target lock tracking, Included SFP slot in HPoE injector		

PTZ PLUS


XNP-9250R
 4K 25x IR PTZ Camera

PTZ PLUS


XNP-8250R
 6MP 25x IR PTZ Camera

PTZ PLUS


XNP-6400R
 2MP 40x IR PTZ Camera

PTZ PLUS


XNP-9250
 4K 25x PTZ Camera

PTZ PLUS


XNP-8250
 6MP 25x PTZ Camera

PTZ PLUS


XNP-6400
 2MP 40x PTZ Camera

Imaging Device	1/2.8" CMOS	1/2.8" CMOS	1/2.8" CMOS	1/2.8" CMOS	1/2.8" CMOS	1/2.8" CMOS
Resolution / Max. Frame Rate	8MP / 30fps	6MP / 30fps	2MP / 60fps	8MP / 30fps	6MP / 30fps	2MP / 60fps
Min. Illumination	Color: 0.1Lux (F1.6, 1/30sec) BW: 0Lux (IR LED On)	Color: 0.1Lux (F1.6, 1/30sec) BW: 0Lux (IR LED On)	Color: 0.05Lux (F1.6, 1/30sec) BW: 0Lux (IR LED On)	Color: 0.1Lux (F1.6, 1/30sec) BW: 0.01Lux (IR LED On)	Color: 0.1Lux (F1.6, 1/30sec) BW: 0.01Lux (IR LED On)	Color: 0.05Lux (F1.6, 1/30sec) BW: 0.005Lux (IR LED On)
Video Output	-	-	-	-	-	-
Focal Length	5~125mm (25x) zoom	5~125mm (25x) zoom	4.25~170mm (40x) zoom	5~125mm (25x) zoom	5~125mm (25x) zoom	4.25~170mm (40x) zoom
Angular Field of View	H: 57.42° (Wide)~2.71° (Tele) V: 33.54° (Wide)~1.55° (Tele)	H: 57.42° (Wide)~2.71° (Tele) V: 33.54° (Wide)~1.55° (Tele)	H: 65.66° (Wide)~1.88° (Tele) V: 39.4° (Wide)~1.09° (Tele)	H: 57.42° (Wide)~2.71° (Tele) V: 33.54° (Wide)~1.55° (Tele)	H: 57.42° (Wide)~2.71° (Tele) V: 33.54° (Wide)~1.55° (Tele)	H: 65.66° (Wide)~1.88° (Tele) V: 39.4° (Wide)~1.09° (Tele)
Pan / Tilt / Rotate	360° Endless / 110° (-20°~90°) / -	360° Endless / 110° (-20°~90°) / -	360° Endless / 110° (-20°~90°) / -	360° Endless / 110° (-20°~90°) / -	360° Endless / 110° (-20°~90°) / -	360° Endless / 110° (-20°~90°) / -
IR Viewable Length	200m (656.17ft), Wise IR	200m (656.17ft), Wise IR	200m (656.17ft), Wise IR	-	-	-
Day & Night	Auto (ICR)	Auto (ICR)	Auto (ICR)	Auto (ICR)	Auto (ICR)/Color/BW/Schedule	Auto (ICR)
Wide Dynamic Range	extremeWDR (120dB)	extremeWDR (120dB)	extremeWDR (150dB)	extremeWDR (120dB)	extremeWDR (120dB)	extremeWDR (150dB)
Digital Noise Reduction	SSNR V	SSNR V	SSNR V	SSNR V	SSNR V	SSNR V
Digital Image Stabilization	Support (built-in gyro sensor)	Support (built-in gyro sensor)	Support (built-in gyro sensor)	Support (built-in gyro sensor)	Support (built-in gyro sensor)	Support (built-in gyro sensor)
Analytics	Intelligent analytics * Audio detection, Sound classification (with NWI/O Box : SPM-4210)	Intelligent analytics * Audio detection, Sound classification (with NWI/O Box : SPM-4210)	Intelligent analytics * Audio detection, Sound classification (with NWI/O Box : SPM-4210)	Intelligent analytics * Audio detection, Sound classification (with NWI/O Box : SPM-4210)	Intelligent analytics * Audio detection, Sound classification (with NWI/O Box : SPM-4210)	Intelligent analytics * Audio detection, Sound classification (with NWI/O Box : SPM-4210)
Business Intelligence	-	-	-	-	-	-
Alarm I/O	Compatible with NWI/O Box (Optional)	Compatible with NWI/O Box (Optional)	Compatible with NWI/O Box (Optional)	Compatible with NWI/O Box (Optional)	Compatible with NWI/O Box (Optional)	Compatible with NWI/O Box (Optional)
Audio I/O	Compatible with NWI/O Box (Optional)	Compatible with NWI/O Box (Optional)	Compatible with NWI/O Box (Optional)	Compatible with NWI/O Box (Optional)	Compatible with NWI/O Box (Optional)	Compatible with NWI/O Box (Optional)
Video Compression	H.265 / H.264, MJPEG	H.265 / H.264, MJPEG	H.265 / H.264, MJPEG	H.265 / H.264, MJPEG	H.265 / H.264, MJPEG	H.265 / H.264, MJPEG
WiseStream	WiseStream II	WiseStream II	WiseStream II	WiseStream II	WiseStream II	WiseStream II
Streaming	Up to 10 profiles	Up to 10 profiles	Up to 10 profiles	Up to 10 profiles	Up to 10 profiles	Up to 10 profiles
Edge Storage	micro SD/SDHC/SDXC	micro SD/SDHC/SDXC	micro SD/SDHC/SDXC	micro SD/SDHC/SDXC	micro SD/SDHC/SDXC	micro SD/SDHC/SDXC
Application Programming Interface	ONVIF profile S/G/T, SUNAPI, Wisenet open platform	ONVIF profile S/G/T, SUNAPI, Wisenet open platform	ONVIF profile S/G/T, SUNAPI, Wisenet open platform	ONVIF profile S/G/T, SUNAPI, Wisenet open platform	ONVIF profile S/G/T, SUNAPI, Wisenet open platform	ONVIF profile S/G/T, SUNAPI, Wisenet open platform
Operating Temperature	-40°C~+55°C (-40°F~+131°F) / +74°C (+165°F) (MAX) based on NEMA-TS 2 (2.2.7) * Start up should be done at above -30°C 0~95% RH (Non-condensing)	-40°C~+55°C (-40°F~+131°F) / +74°C (+165°F) (MAX) based on NEMA-TS 2 (2.2.7) * Start up should be done at above -30°C 0~95% RH (Non-condensing)	-40°C~+50°C (-40°F~+122°F) / +74°C (+165°F) (MAX) based on NEMA-TS 2 (2.2.7) * Start up should be done at above -30°C 0~95% RH (Non-condensing)	-40°C~+55°C (-40°F~+131°F) / +74°C (+165°F) (MAX) based on NEMA-TS 2 (2.2.7) * Start up should be done at above -30°C 0~95% RH (Non-condensing)	-40°C~+55°C (-40°F~+131°F) / +74°C (+165°F) (MAX) based on NEMA-TS 2 (2.2.7) * Start up should be done at above -30°C 0~95% RH (Non-condensing)	-40°C~+50°C (-40°F~+122°F) / +74°C (+165°F) (MAX) based on NEMA-TS 2 (2.2.7) * Start up should be done at above -30°C 0~95% RH (Non-condensing)
Certification	IP66, IK 10, NEMA4X, NEMA TS-2 (2.2.8, 2.2.9)	IP66, IK 10, NEMA4X, NEMA TS-2 (2.2.8, 2.2.9)	IP66, IK 10, NEMA4X, NEMA TS-2 (2.2.8, 2.2.9)	IP66, IK 10, NEMA4X, NEMA TS-2 (2.2.8, 2.2.9)	IP66, IK 10, NEMA4X, NEMA TS-2 (2.2.8, 2.2.9)	IP66, IK 10, NEMA4X, NEMA TS-2 (2.2.8, 2.2.9)
Power Consumption	HPoE (Camera only): Typical 20W, Max 40W	HPoE (Camera only): Typical 20W, Max 40W	HPoE (Camera only): Typical 20W, Max 40W	PoE+ (IEEE802.3at, Class4): Typical 20W, Max 25W	PoE+ (IEEE802.3at, Class4): Typical 20W, Max 25W	PoE+ (IEEE802.3at, Class4): Typical 20W, Max 25W
Dimensions (WxHxD) / Weight	Ø 158 x 293.3mm (Ø 6.22" x 11.55") 3.2kg (7.05lb)	Ø 158 x 293.3mm (Ø 6.22" x 11.55") 3.2kg (7.05lb)	Ø 158 x 293.3mm (Ø 6.22" x 11.55") 3.2kg (7.05lb)	Ø 158 x 293.3mm (Ø 6.22" x 11.55") 3.2kg (7.05lb)	Ø 158 x 293.3mm (Ø 6.22" x 11.55") 3.2kg (7.05lb)	Ø 158 x 293.3mm (Ø 6.22" x 11.55") 3.2kg (7.05lb)
Additional Features	1 Terminal & Cable, Upgraded preset accuracy, Built-in wiper, Object auto tracking (Based on AI engine), Target lock tracking, Included SFP slot in HPoE injector			1 Terminal & Cable, Upgraded preset accuracy, Object auto tracking (Based on AI engine), Target lock tracking		



XNP-6550RH
2MP 55x IR PTZ Camera



XNP-6371RH
2MP 37x IR PTZ Camera



XNP-6120H
2MP 12x PTZ Camera



XNP-6040H
2MP 4.3x PTZ Camera

Imaging Device	1/2.8" CMOS	1/2" 2MP CMOS	1/2.8" CMOS	1/2.8" CMOS
Resolution / Max. Frame Rate	2MP / 60fps	2MP / 60fps	2MP / 60fps	2MP / 60fps
Min. Illumination	Color : 0.02Lux (F1.6) B/W : 0Lux (IR LED on)	Color : 0.01Lux (F1.5, 1/30sec) BW : 0Lux (IR LED)	Color : 0.03Lux (F1.6) B/W : 0.003Lux (F1.6)	Color : 0.015Lux (F1.4) B/W : 0.0015Lux (F1.4)
Video Output	CVBS 1.0 Vp-p	CVBS : 1.0 Vp-p	CVBS 1.0 Vp-p, Micro USB type B	CVBS 1.0 Vp-p, Micro USB type B
Focal Length	4.75 ~ 261.4mm (55x) zoom	6 ~ 222mm (37x) zoom	5.2 ~ 62.4mm (12x) zoom	2.8 ~ 12mm (4.3x) zoom
Angular Field of View	H: 58.6° (Wide) ~ 1.23° (Tele) V: 34.8° (Wide) ~ 0.71° (Tele)	H: 59.3° (Wide) ~ 1.9° (Tele) V: 35.8° (Wide) ~ 1.1° (Tele)	H: 54.58° (Wide) ~ 5.3° (Tele) V: 32.19° (Wide) ~ 3° (Tele)	H: 119.5° (Wide) ~ 27.9° (Tele) V: 62.8° (Wide) ~ 15.7° (Tele) D: 142.1° (Wide) ~ 32° (Tele)
Pan / Tilt / Rotate	360° Endless / 95° (-5° ~ 90°) / -	360° Endless / 190° (-5° ~ 185°) / -	360° Endless / 190° (-5° ~ 185°) / -	0° ~ 355° / 0° ~ 90°
IR Viewable Length	500m (1,640.42ft)	350m (1,148.29ft)	-	-
Day & Night	Auto (ICR)	Auto (ICR)	Auto (ICR)	Auto (ICR)
Wide Dynamic Range	120dB	150dB	150dB	150dB
Digital Noise Reduction	SSNR V	SSNR V	SSNR V	SSNR V
Digital Image Stabilization	Support (Built-in Gyro sensor)	Support (built-in gyro sensor)	Support (Built-in Gyro sensor)	Support (Built-in Gyro sensor)
Analytics	Intelligent analytics Audio detection Sound classification Shock detection Defog detection	Intelligent analytics Audio detection Sound classification Shock detection Defog detection	Intelligent analytics Audio detection, Sound classification Defog detection	Intelligent analytics Audio detection, Sound classification Defog detection
Business Intelligence	-	-	-	-
Alarm I/O	4 / 2	4 / 2	1 / 1	1 / 1
Audio I/O	Selectable (mic in/line in) / Line out	Selectable (mic in/line in) / Line out	Selectable (mic in/line in) / Line out	Selectable (mic in/line in) / Line out
Video Compression	H.265 / H.264, MJPEG	H.265 / H.264, MJPEG	H.265 / H.264, MJPEG	H.265 / H.264, MJPEG
WiseStream	WiseStream II	WiseStream II	WiseStream II	WiseStream II
Streaming	Up to 10 Profiles	Up to 10 Profiles	Up to 10 Profiles	Up to 10 Profiles
Edge Storage	micro SD/SDHC/SDXC	Micro SD/SDHC/SDXC	micro SD/SDHC/SDXC	micro SD/SDHC/SDXC
Application Programming Interface	ONVIF profile S/G, SUNAPI, Wisenet open platform	ONVIF Profile S/G/T SUNAPI (HTTP API) Wisenet open platform	ONVIF profile S/G, SUNAPI, Wisenet open platform	ONVIF profile S/G, SUNAPI, Wisenet open platform
Operating Temperature	-50°C ~ +55°C (-122°F ~ +131°F) * Start up above -30°C (HPoE Mode)	-50°C ~ +55°C (-122°F ~ +131°F) / 0 ~ 90% RH	-30°C ~ +55°C (-22°F ~ +131°F)	-30°C ~ +55°C (-22°F ~ +131°F)
Certification	IP66, IK10	IP66, IK10	IP66, IK10	IP66, IK10
Power Consumption	HPoE : 60W 24VAC : Max 92W	24VAC : Max 90W	PoE, 12VDC : Max 12W	PoE : Max 9.6W 12VDC : Max 8.6W
Dimensions (WxHxD) / Weight	Ø236.9 x 407.7mm (Ø9.33" x 16.05") 7.1kg (15.65lb)	Ø236.9 x 407.7mm (Ø9.33" x 16.05") 7.1kg (15.65lb)	Ø168 x 161.5mm (Ø6.61" x 6.36") 1.9kg (4.19lb)	Ø136.1 x 106.1mm (Ø5.36" x 4.18") 0.78kg (1.72lb)
Additional Features	Auto tracking (Based on MD)	Auto tracking (Based on MD)	Auto tracking (Based on MD)	Auto tracking (Based on MD)



XNZ-6320A
2MP 32x Zoom Camera



XNZ-L6320A
2MP 32x Zoom Camera

SolidEDGE



NEW

PNV-A6081R-E1T
2MP Camera with 1TB Rugged SSD

SolidEDGE



NEW

PNV-A6081R-E2T
2MP Camera with 2TB Rugged SSD

Imaging Device	1/2.8" 2MP CMOS	1/2.8" 2MP CMOS	1/2" CMOS	1/2" CMOS
Resolution / Max. Frame Rate	2MP / 60fps	2MP / 60fps	2MP / 120fps	2MP / 120fps
Min. Illumination	Color: 0.05Lux (1/30sec, F1.6) B/W: 0.005Lux (1/30sec, F1.6)	Color: 0.05Lux (1/30sec, F1.6) B/W: 0.005Lux (1/30sec, F1.6)	Color: 0.008Lux(F1.3, 1/30sec, 30IRE) BW: 0.0008Lux(F1.3, 1/30sec, 30IRE), 0Lux(IR LED on), 30/25fps Color: 0.016Lux(F1.3, 1/60sec, 30IRE) BW: 0.0016Lux(F1.3, 1/60sec, 30IRE), 0Lux(IR LED on), 60/50fps Color: 0.032Lux(F1.3, 1/120sec, 30IRE) BW: 0.0032Lux(F1.3, 1/120sec, 30IRE), 0Lux(IR LED on), 120/100fps	Color: 0.008Lux(F1.3, 1/30sec, 30IRE) BW: 0.0008Lux(F1.3, 1/30sec, 30IRE), 0Lux(IR LED on), 30/25fps Color: 0.016Lux(F1.3, 1/60sec, 30IRE) BW: 0.0016Lux(F1.3, 1/60sec, 30IRE), 0Lux(IR LED on), 60/50fps Color: 0.032Lux(F1.3, 1/120sec, 30IRE) BW: 0.0032Lux(F1.3, 1/120sec, 30IRE), 0Lux(IR LED on), 120/100fps
Video Output	CVBS 1.0 Vp-p, Micro USB Type B	CVBS 1.0 Vp-p	CVBS: 1.0 Vp-p / 75Ω composite, 720x480(N), 720x576(P) for installation	CVBS: 1.0 Vp-p / 75Ω composite, 720x480(N), 720x576(P) for installation
Focal Length	4.44 ~ 142.6mm (Optical 32X) (digital 32x, total 1024x zoom)	4.44 ~ 142.6mm (Optical 32X) (digital 32x, total 1024x zoom)	4.38~9.33mm(2.13x) motorized varifocal	4.38~9.33mm(2.13x) motorized varifocal
Angular Field of View	H: 64.66° (Wide) ~ 2.29° (Tele) V: 38.08° (Wide) ~ 1.3° (Tele)	H: 64.66° (Wide) ~ 2.29° (Tele) V: 38.08° (Wide) ~ 1.3° (Tele)	H: 104° (Wide) ~ 44° (Tele) V: 55° (Wide) ~ 24° (Tele) D: 124° (Wide) ~ 51° (Tele)	H: 104° (Wide) ~ 44° (Tele) V: 55° (Wide) ~ 24° (Tele) D: 124° (Wide) ~ 51° (Tele)
Pan / Tilt / Rotate	-	-	0° ~ 360° / -45° ~ 85° / 0° ~ 355°	0° ~ 360° / -45° ~ 85° / 0° ~ 355°
IR Viewable Length	-	-	Wise IR 40m (131.23ft)	Wise IR 40m (131.23ft)
Day & Night	Auto (ICR)	Auto (ICR)	Auto (ICR)	Auto (ICR)
Wide Dynamic Range	120dB	120dB	120dB	120dB
Digital Noise Reduction	SSNR V	SSNR V	WiseNR, SSNR V	WiseNR, SSNR V
Digital Image Stabilization	Support	Support	-	-
Analytics	Intelligent analytics Audio detection Sound classification Shock detection Defog detection	Intelligent analytics Audio detection Sound classification Shock detection Defog detection	Analytics events: Defocus detection, Motion detection, Tampering, Audio detection, Sound classification, Virtual line(Crossing/Direction), Virtual area(Loitering/Intrusion/Enter/Exit/Appear/Disappear) Digital auto tracking	
Business Intelligence	-	-	-	-
Alarm I/O	1 / 2	1 / 1	Input 1ea / Output 1ea	Input 1ea / Output 1ea
Audio I/O	Selectable (mic in/line in) / Line out	Selectable (mic in/line in) / Line out	Selectable (mic in/line in) / Line out	Selectable (mic in/line in) / Line out
Video Compression	H.265 / H.264, MJPEG	H.265 / H.264, MJPEG	H.265/H.264, MJPEG	H.265/H.264, MJPEG
WiseStream	WiseStream II	WiseStream II	Manual (Sea area), WiseStream II	Manual (Sea area), WiseStream II
Streaming	Up to 10 profiles	Up to 10 profiles	Up to 5 profiles	Up to 5 profiles
Edge Storage	micro SD/SDHC/SDXC 2 slot 512GB	micro SD/SDHC/SDXC 1slot 256GB	1TB SSD included (WAVE pre-installed)	2TB SSD included (WAVE pre-installed)
Application Programming Interface	ONVIF Profile S/G/T SUNAPI (HTTP API) Wisenet open platform	ONVIF Profile S/G/T SUNAPI (HTTP API) Wisenet open platform	ONVIF Profile S/T/M SUNAPI (HTTP API)	ONVIF Profile S/T/M SUNAPI (HTTP API)
Operating Temperature	-10°C ~ +55°C (-14°F ~ +131°F) / 0~90% RH	-10°C ~ +55°C (-14°F ~ +131°F) / 0~90% RH	-30° C ~ +55° C (-22° F ~ +131° F) / 0~95%RH(non-condensing) * Start up should be done at above -20°C Humidity control /w AIR vent	-30° C ~ +55° C (-22° F ~ +131° F) / 0~95%RH(non-condensing) * Start up should be done at above -20°C Humidity control /w AIR vent
Certification	-	-	IP66/IP67/IP6K9K, NEMA4X, IK10	IP66/IP67/IP6K9K, NEMA4X, IK10
Power Consumption	PoE: Max 7.5W, Typical 4.5W 12VDC: Max 7W, Typical 4W	PoE: Max 7.5W, Typ 5W 12VDC: Max 5.7W, Typ 3.7W	PoE+: Max 19.2W, typical 14.4W 12VDC: Max 17.5W, typical 12.7W	PoE+: Max 19.2W, typical 14.4W 12VDC: Max 17.5W, typical 12.7W
Dimensions (WxHxD) / Weight	W 96 x H 76 x D 143.5mm (3.78" x 2.99" x 5.65") 578g (1.27 lb)	W 72 x H 63.9 x D 135.4mm (2.83" x 2.52" x 5.33") 480g (1.06 lb)	Ø 180x130mm (Ø 7.09x5.12") 1900g (4.19 lb)	Ø 180x130mm (Ø 7.09x5.12") 1900g (4.19 lb)
Additional Features	Auto tracking (Based on MD)	Auto tracking (Based on MD)	Connect and record up to 5 additional cameras Pre-licensed with 1x Wave channel, purchase additional licenses to suit number of connected cameras	



PNM-9031RV
15MP 192° IR Panoramic Camera



PNM-9022V
8.3MP 180° /209° Panoramic Camera



PNM-9085RQZ1
5MP x 4CH IR PTRZ Multi-directional Camera



PNM-9084RQZ1
2MP x 4CH IR PTRZ Multi-directional Camera



PNM-9084QZ1
2MP x 4CH PTRZ Multi-directional Camera

Imaging Device	1/2.8" 5MP CMOS (x4)	1/2.8" 4CH	1/1.8" 5MP CMOS x 4CH	1/2.8" CMOS x 4CH	1/2.8" CMOS x 4CH
Resolution / Max. Frame Rate	15MP / 20fps	8.3MP / 30fps	8MP / 60Hz	8MP / 60fps	8MP / 60fps
Min. Illumination	Color: 0.1Lux (F1.6, 1/30sec) BW: 0Lux (IR LED on)	Color: 0.3Lux (F1.6) Color: 0.03Lux (F1.6)	Color: 0.11lux (F1.92, 30IRE) BW: 0Lux (IR LED on)	Color: 0.05lux (F1.6, 30IRE) BW: 0Lux (IR LED on)	Color: 0.04lux (F2.2, 1/30sec) BW: 0.004lux (F2.2, 1/30sec)
Video Output	Micro USB Type B	Micro USB Type B	-	-	-
Focal Length	4.3mm Fixed	2.8mm fixed focal	4.13~9.4mm (2.3x) motorized varifocal	3.2~10mm (3.1x) motorized varifocal	3~6mm (2x) motorized varifocal
Angular Field of View	H: 196° / V: 64° (Min distance 5m) H: 197° / V: 64° (Max distance 100m)	H: 209° / V: 83.3°	H: 87.58° (Wide) ~ 37.34° (Tele) V: 64.58° (Wide) ~ 28.04° (Tele) D: 112.46° (Wide) ~ 46.85° (Tele)	H: 109° (Wide) ~ 33.2° (Tele) V: 57.4° (Wide) ~ 18.7° (Tele) D: 132° (Wide) ~ 38° (Tele)	H: 107° (Wide) ~ 56.3° (Tele) V: 57° (Wide) ~ 31.5° (Tele) D: 126° (Wide) ~ 64.3° (Tele)
Pan / Tilt / Rotate	0° ~ 355° / 0° ~ 60° / -	0° ~ 355° / 0° ~ 60° / -	Remote adjustment (Max. 200cycles) 0~360° / 35~80° / 0~90°	Remote adjustment (Max. 200cycles) 0~360° / 35~80° / 0~90°	Remote adjustment (Max. 200cycles) 0~360° / 35~80° / 0~90°
IR Viewable Length	20m (65.62ft)	-	30m (98.43ft)	30m (98.43ft)	-
Day & Night	Auto (ICR)	Auto (ICR)	Auto (ICR)	Auto (ICR)	Auto (ICR)
Wide Dynamic Range	120dB	extremeWDR (120dB)	120dB	120dB	120dB
Digital Noise Reduction	SSNR V	SSNR V	SSNR V	SSNR V	SSNR V
Digital Image Stabilization	-	-	Support	Support	Support
Analytics	Defocus detection, Motion detection, Appear/Disappear, Enter/Exit, Tampering, Virtual line, Audio detection	Defocus detection, Motion detection, Appear/Disappear, Enter/Exit, Tampering, Virtual line, Audio detection	Defocus detection, Directional detection, Fog detection, Face detection, Motion detection, Appear/Disappear, Enter/Exit, Loitering, Tampering, Virtual line, Audio detection	Defocus detection, Directional detection, Fog detection, Face detection, Motion detection, Appear/Disappear, Enter/Exit, Loitering, Tampering, Virtual line, Audio detection	Defocus detection, Directional detection, Fog detection, Face detection, Motion detection, Appear/Disappear, Enter/Exit, Loitering, Tampering, Virtual line, Audio detection
Business Intelligence	Heatmap	Heatmap	-	-	-
Alarm I/O	2 / 1	1 / 1	1 / 1	1 / 1	1 / 1
Audio I/O	Selectable (mic in/line in)	Selectable (mic in/line in) / Line out	Selectable (mic in/line in) / Line out	Selectable (mic in/line in) / Line out	Selectable (mic in/line in) / Line out
Video Compression	H.265 / H.264, MJPEG	H.265 / H.264, MJPEG	H.265 / H.264, MJPEG	H.265 / H.264, MJPEG	H.265 / H.264, MJPEG
WiseStream	WiseStream II	WiseStream II	WiseStream II	WiseStream II	WiseStream II
Streaming	Up to 3 profiles	Up to 10 profiles	Up to 10 profiles	Up to 10 profiles	Up to 10 profiles
Edge Storage	micro SD/SDHC/SDXC 2slots 512GB (256GBx2)	micro SD/SDHC/SDXC	micro SD/SDHC/SDXC 4slot 256GB (each CH)	micro SD/SDHC/SDXC 4slot 256GB (each CH)	micro SD/SDHC/SDXC 4slot 256GB (each CH)
Application Programming Interface	ONVIF Profile S/G/T SUNAPI (HTTP API)	ONVIF Profile S/G/T, SUNAPI, Wisenet open platform	ONVIF Profile S/T SUNAPI (HTTP API) Wisenet open platform	ONVIF Profile S/T SUNAPI (HTTP API) Wisenet open platform	ONVIF Profile S/T SUNAPI (HTTP API) Wisenet open platform
Operating Temperature	-40°C ~ +55°C (-40°F ~ +131°F) * Startup should be above -30°C 0~95% RH (Non-condensing)	-40°C ~ +60°C (-40°F ~ +131°F) / 0~95% RH (Non-condensing) * Maximum temperature: +60°C (intermittent)	-40°C ~ +55°C (-40°F ~ +131°F) / 0~90% RH	-40°C ~ +55°C (-40°F ~ +131°F) / 0~90% RH	-40°C ~ +55°C (-40°F ~ +131°F) / 0~90% RH *Startup should be above at -35°C
Certification	IP66, IK10, NEMA4X	IP66, IK10, NEMA4X	IP66, IK10, NEMA4X	IP66, IK10, NEMA4X	IP66, IK10, NEMA4X
Power Consumption	PoE+: Max 23.5W, Typical 18W 12VDC: Max 20.5W, Typical 16W	PoE+: Max 18W, Typical 10.4W 12VDC: Max 16W, Typical 9W	PoE: Max. 45W, Typical 33.7W 12VDC: Max. 42W, Typical 32W	PoE: Max. 42W, Typical 30W 12VDC: Max. 38W, Typical 28.2W	Max. 33W, Typical 20W
Dimensions (WxHxD) / Weight	Ø253 x 170mm 2.6kg (4.7lb)	Ø253 x 165mm (Ø9.96" x 6.5") 3.2kg (7.1lb)	Ø315 x 145.9mm (Ø12.4" x 5.74") 5.2kg (11.5lb)	Ø315 x 145.9mm (Ø12.4" x 5.74") 5.2kg (11.5lb)	Ø251 x 116.5mm 3kg (6.6lb)
Additional Features	-	4CH Stitching	Motorized PTRZ	Motorized PTRZ	Motorized PTRZ



PNM-8082VT
2MP x 3CH Multi-directional Camera



PNM-12082RVD
6MP x 2CH Multi-directional Camera



PNM-7082RVD
2MP x 2CH Multi-directional Camera

Imaging Device	1/2.8" CMOS 3CH	1/2.8" CMOS x 2CH	1/2.8" CMOS x 2CH
Resolution / Max. Frame Rate	2MP / 30fps	6MP / 15fps	2MP / 30fps
Min. Illumination	Color: 0.04lux(F2.2) BW: 0.004lux(F2.2)	Color: 0.16lux (F1.67, 1/30sec, 30IRE) BW: 0Lux (IR LED on)	Color: 0.035lux (F2.2, 1/30sec, 30IRE) BW: 0lux (IR LED on)
Video Output	CVBS: 1.0 Vp-p	micro USB Type B	micro USB Type B
Focal Length	3 ~ 6mm (2x) motorized varifocal	3.54 ~ 6.69mm (1.9x) motorized varifocal	3 ~ 6mm (2x) motorized varifocal
Angular Field of View	H: 107° (Wide) ~ 56.3° (Tele) V: 57° (Wide) ~ 31.5° (Tele) D: 126° (Wide) ~ 64.3° (Tele)	H: 96° (Wide) ~ 47° (Tele) V: 51° (Wide) ~ 26° (Tele) D: 113° (Wide) ~ 54° (Tele)	H: 107° (Wide) ~ 56° (Tele) V: 57° (Wide) ~ 31° (Tele) D: 126° (Wide) ~ 64° (Tele)
Pan / Tilt / Rotate	0 ~ 360° / 0 ~ 73° / 0 ~ 90°	0 ~ 355° / 0 ~ 78° / 0 ~ 180°	0 ~ 355° / 0 ~ 78° / 0 ~ 180°
IR Viewable Length	-	25m (82ft)	25m (82ft)
Day & Night	Auto (ICR)	Auto (ICR)	Auto (ICR)
Wide Dynamic Range	extremeWDR (150dB)	extremeWDR (120dB)	extremeWDR (150dB)
Digital Noise Reduction	SSNR V	WiseNR, SSNR V	WiseNR, SSNR V
Digital Image Stabilization	Support	-	-
Analytics	Defocus detection, Directional detection, Motion detection, Enter/Exit, Tampering, Virtual line	Analytics events* : Defocus detection, Motion detection, Tampering, Virtual line (Crossing/Direction), Virtual area (Loitering/Enter/Exit) * Support Audio detection, Sound classification via optional SPM-4210I/O box	Analytics events* : Defocus detection, Motion detection, Tampering, Virtual line (Crossing/Direction), Virtual area (Loitering/Enter/Exit) * Support Audio detection, Sound classification via optional SPM-4210I/O box
Business Intelligence	-	-	-
Alarm I/O	-	* Support Alarm via optional SPM-4210I/O box	* Support Alarm via optional SPM-4210I/O box
Audio I/O	-	* Audio in/out via optional SPM-4210I/O box	* Audio in/out via optional SPM-4210I/O box
Video Compression	H.265 / H.264, MJPEG	H.265 / H.264, MJPEG	H.265 / H.264, MJPEG
WiseStream	WiseStream II	WiseStream II	WiseStream II
Streaming	Up to 10 profiles	Up to 10 profiles	Up to 10 profiles
Edge Storage	micro SD/SDHC/SDXC	micro SD/SDHC/SDXC 1slot Max. 512GB	micro SD/SDHC/SDXC 1slot Max. 512GB
Application Programming Interface	ONVIF Profile S/G/T SUNAPI (HTTP API)	ONVIF Profile S/T SUNAPI (HTTP API) Open platform	ONVIF Profile S/T SUNAPI (HTTP API) Open platform
Operating Temperature	-40°C ~ +55°C (-40°F ~ +131°F) / 0~95% RH (Non-condensing) * Start up should be above at -35°C	-40°C ~ +55°C (-40°F ~ +131°F) / 0~95% RH (Non-condensing) * Start up should be above at -35°C	-40°C ~ +55°C (-40°F ~ +131°F) / 0~95% RH (Non-condensing) * Start up should be above at -35°C
Certification	IP66, IK10, NEMA4X	IP66/IP67, NEMA4X, IK10	IP66/IP67, NEMA4X, IK10
Power Consumption	PoE+: Max: 16.5W, Typical: 8.2W	PoE+: Max 18.3W, typical 13.5W	PoE+: Max 17W, typical 12.5W
Dimensions (WxHxD) / Weight	Ø251 x 116.5mm (Ø9.88" x 4.59") 3kg (6.6lb)	W215 x D135 x H93.2mm (8.46" x 5.31" x 3.67") 1.33kg (2.9lb)	W215 x D135 x H93.2mm (8.46" x 5.31" x 3.67") 1.33kg (2.9lb)
Additional Features	3CH Multi-directional	-	-



PNM-9000QB
2MP x 4CH Remote Head Camera



XNB-6002
2MP x 1CH Remote Head Camera



SLA-T4680A/T4680VA
2MP lens for PNM-9000QB



SLA-T2480A/T2480VA
2MP lens for PNM-9000QB



SLA-T1080FA
2MP lens for PNM-9000QB

	PNM-9000QB 2MP x 4CH Remote Head Camera	XNB-6002 2MP x 1CH Remote Head Camera	SLA-T4680A/T4680VA 2MP lens for PNM-9000QB	SLA-T2480A/T2480VA 2MP lens for PNM-9000QB	SLA-T1080FA 2MP lens for PNM-9000QB
Imaging Device	-	-	1/2.8" 2MP CMOS	1/2.8" 2MP CMOS	1/2.8" 2MP CMOS
Resolution / Max. Frame Rate	2MP / 30fps	2MP / 60fps	-	-	-
Min. Illumination	-	-	Color: 0.06Lux (F2.5)	Color: 0.045Lux (F2.0)	Color: 0.03Lux (F1.6)
Video Output	HDMI (1920x1080, Quad view support)	CVBS 1.0 Vp-p, Micro USB type B	-	-	-
Focal Length	-	-	4.6mm fixed focal	2.4mm fixed focal	1.6mm fixed focal
Angular Field of View	-	-	H: 73° / V: 39° / D: 85°	H: 138° / V: 73° / D: 165°	H: 187° / V: 113.9°
Pan / Tilt / Rotate	-	-	-	-	-
IR Viewable Length	-	-	-	-	-
Day & Night	Auto (electrical)	Auto (electrical)	-	-	-
Wide Dynamic Range	extremeWDR (150dB)	extremeWDR (120dB)	-	-	-
Digital Noise Reduction	SSNR V	SSNR V, WiseNR	-	-	-
Digital Image Stabilization	Support	Support (Built-in Gyro sensor)	-	-	-
Analytics	Defocus detection, Directional detection, Motion detection, Enter/Exit, Tampering, Virtual line	Analytic events - Defocus detection, Motion detection, Tampering, Fog detection, Audio detection, Sound classification, Face detection, Virtual area (Loitering/Intrusion/Enter/Exit/Appear/Disappear), Virtual line (Crossing/Direction)	-	-	-
Business Intelligence	-	People counting, Queue management, Heatmap	-	-	-
Alarm I/O	1 / 1	1 / 1	-	-	-
Audio I/O	Selectable (mic in/line in) / Line out	Selectable (mic in/line in), Built-in mic / Line out	-	-	-
Video Compression	H.265 / H.264, MJPEG	H.265, H.264, MJPEG	-	-	-
WiseStream	WiseStream II	WiseStream II	-	-	-
Streaming	Up to 10 profiles	Up to 10 Profiles	-	-	-
Edge Storage	micro SD/SDHC/SDXC	micro SD/SDHC/SDXC 1 slot Max. 1TB	-	-	-
Application Programming Interface	ONVIF Profile S/G/T, SUNAPI (HTTP API) Wisenet open platform	ONVIF profile S/G, SUNAPI, Wisenet open platform	-	-	-
Operating Temperature	-10°C ~ +45°C (-40°F ~ +113°F) / 0~95% RH (Non condensing)	-10°C ~ +55°C (+14°F ~ +131°F) / 0~90% RH (non-condensing)	-	-	-
Certification	-	-	-	-	-
Power Consumption	PoE: Max 22W, Typical 16.70W DC: Max 19W, Typical: 14W	PoE: Max 10.5W, typical 7.4W 12VDC: Max 8.6W, typical 5.8W Power redundancy failover	-	-	-
Dimensions (WxHxD) / Weight	W 200 x H 37 x D 146mm (7.87" x 1.46" x 5.75") 715g (1.58lb)	W 131.1 x H 33.5 x D 86mm (5.16" x 1.32" x 3.39") 420g	Ø24 x L49.8mm, 310g (SLA-T4680A) W 30 x H 27.9 x D 45mm, 321g (SLA-T4680VA)	Ø24 x L49.8mm, 318g (SLA-T2480A) W 30 x H 27.9 x D 45mm, 328g (SLA-T2480VA)	Ø35 x L68.9mm 430g (0.95lb)
Additional Features	Optional pinhole/fixed lens	compatible lens: SLA-T1080FA, SLA-T2480A, SLA-T2480VA, SLA-T4680A, SLA-T4680VA	-	-	-



QNO-8080R
5MP IR Bullet Camera



QNO-8020R
5MP IR Bullet Camera



QNO-8010R
5MP IR Bullet Camera



QND-8080R
5MP IR Dome Camera



QND-8020R
5MP IR Dome Camera

Imaging Device	1/2.8" CMOS	1/2.8" CMOS	1/2.8" CMOS	1/2.8" CMOS	1/2.8" CMOS
Resolution / Max. Frame Rate	5MP / 30fps	5MP / 30fps	5MP / 30fps	5MP / 30fps	5MP / 30fps
Min. Illumination	Color : 0.15Lux (F1.6) B/W : 0Lux (IR LED on)	Color : 0.15Lux (F1.6) B/W : 0Lux (IR LED on)	Color : 0.15Lux (F2.0) B/W : 0Lux (IR LED on)	Color : 0.15Lux (F1.6) B/W : 0Lux (IR LED on)	Color : 0.15Lux (F1.6) B/W : 0Lux (IR LED on)
Video Output	CVBS 0.1.0 Vp-p	CVBS 1.0 Vp-p	CVBS 1.0 Vp-p	CVBS 1.0 Vp-p	CVBS 1.0 Vp-p
Focal Length	3.2 ~ 10mm (3.1x) motorized varifocal	4.0mm fixed	2.8mm fixed	3.2 ~ 10mm (3.1x) motorized varifocal	4.0mm fixed
Angular Field of View	H: 100.3° (Wide) ~ 31.2° (Tele) V: 72.3° (Wide) ~ 23.5° (Tele) D: 133.1° (Wide) ~ 38.8° (Tele)	H: 79.8° / V: 58.1° / D: 105.9°	H: 104.7° / V: 76.5° / D: 136°	H: 100.3° (Wide) ~ 31.2° (Tele) V: 72.3° (Wide) ~ 23.5° (Tele) D: 133.1° (Wide) ~ 38.8° (Tele)	H: 79.8° / V: 58.1° / D: 105.9°
Pan / Tilt / Rotate	-	-	-	0° ~ 350° / 0° ~ 67° / 0° ~ 355°	0° ~ 350° / 0° ~ 67° / 0° ~ 355°
IR Viewable Length	30m (98.43ft)	25m (82.02ft)	20m (65.62ft)	20m (65.62ft)	20m (65.62ft)
Day & Night	Auto (ICR)	Auto (ICR)	Auto (ICR)	Auto (ICR)	Auto (ICR)
Wide Dynamic Range	120dB	120dB	120dB	120dB	120dB
Digital Noise Reduction	SSNR	SSNR	SSNR	SSNR	SSNR
Digital Image Stabilization	-	-	-	-	-
Analytics	Intelligent analytics	Intelligent analytics	Intelligent analytics	Intelligent analytics	Intelligent analytics
Business Intelligence	-	-	-	-	-
Alarm I/O	1 / 1	1 / 1	1 / 1	1 / 1	1 / 1
Audio I/O	-	-	-	-	-
Video Compression	H.265 / H.264, MJPEG	H.265 / H.264, MJPEG	H.265 / H.264, MJPEG	H.265 / H.264, MJPEG	H.265 / H.264, MJPEG
WiseStream	WiseStream II	WiseStream II	WiseStream II	WiseStream II	WiseStream II
Streaming	Up to 3 Profiles	Up to 3 Profiles	Up to 3 Profiles	Up to 3 Profiles	Up to 3 Profiles
Edge Storage	micro SD/SDHC/SDXC	micro SD/SDHC/SDXC	micro SD/SDHC/SDXC	micro SD/SDHC/SDXC	micro SD/SDHC/SDXC
Application Programming Interface	ONVIF profile S/G/T, SUNAPI, Wisenet open platform	ONVIF profile S/G/T, SUNAPI, Wisenet open platform	ONVIF profile S/G/T, SUNAPI, Wisenet open platform	ONVIF profile S/G/T, SUNAPI, Wisenet open platform	ONVIF profile S/G/T, SUNAPI, Wisenet open platform
Operating Temperature	-30°C ~ +55°C (-22°F ~ +131°F) * Start up above -20°C (-4°F)	-30°C ~ +55°C (-22°F ~ +131°F) * Start up above -20°C (-4°F)	-30°C ~ +55°C (-22°F ~ +131°F) * Start up above -20°C (-4°F)	-10°C ~ +50°C (+14°F ~ +122°F)	-10°C ~ +50°C (+14°F ~ +122°F)
Certification	IP66, IK10	IP66, IK10	IP66, IK10	-	-
Power Consumption	PoE: Max 9.5W, typical 7.3W	PoE: Max 7.5W, typical 6.1W	PoE: Max 7.5W, typical 6.1W	PoE: Max 8.9W, typical 6.6W	PoE: Max 6.8W, typical 5W
Dimensions (WxHxD) / Weight	Ø91 x 322.9mm (Ø3.58" x 12.71") 1.19kg (2.624lb)	Ø70 x 246mm (Ø2.76" x 9.69") 680g (1.499lb)	Ø70 x 246mm (Ø2.76" x 9.69") 680g (1.499lb)	Ø120.3 x 102mm (Ø4.74" x 4.02") 430g (0.948lb)	Ø110.6 x 89.5mm (Ø4.35" x 3.52") 360g (0.794lb)
Additional Features	Hallway View	Hallway View	Hallway View	Hallway View	Hallway View



QND-8010R
SMP IR Dome Camera



QND-8021
SMP Dome Camera



QND-8011
SMP Dome Camera



QNV-8080R
SMP IR Vandal Dome Camera

Imaging Device	1/2.8" CMOS	1/2.8" CMOS	1/2.8" CMOS	1/2.8" CMOS
Resolution / Max. Frame Rate	5MP / 30fps	5MP / 30fps	5MP / 30fps	5MP / 30fps
Min. Illumination	Color : 0.15Lux (F2.0) B/W : 0Lux (IR LED on)	Color : 0.15Lux (F1.6)	Color : 0.15Lux (F2.0)	Color : 0.15Lux (F1.6) B/W : 0Lux (IR LED on)
Video Output	CVBS 1.0 Vp-p	Micro HDMI	Micro HDMI	CVBS 1.0 Vp-p
Focal Length	2.8mm fixed	4mm fixed	2.8mm fixed	3.2~10mm (3.1x) motorized varifocal
Angular Field of View	H : 104.7° / V : 76.5° / D : 136°	H : 80.1° / V : 58° / D : 105.8°	H : 104.4° / V : 76.7° / D : 136.1°	H : 100.3° (Wide) ~ 31.2° (Tele) V : 72.3° (Wide) ~ 23.5° (Tele) D : 133.1° (Wide) ~ 38.8° (Tele)
Pan / Tilt / Rotate	0° ~ 350° / 0° ~ 67° / 0° ~ 355°	0° ~ 350° / 0° ~ 69° / 0° ~ 355°	0° ~ 350° / 0° ~ 69° / 0° ~ 355°	0° ~ 350° / 0° ~ 67° / 0° ~ 355°
IR Viewable Length	20m (65.62ft)	-	-	30m (98.42ft)
Day & Night	Auto (ICR)	Auto (Electrical)	Auto (Electrical)	Auto (ICR)
Wide Dynamic Range	120dB	120dB	120dB	120dB
Digital Noise Reduction	SSNR	SSNR	SSNR	SSNR
Digital Image Stabilization	-	-	-	-
Analytics	Intelligent analytics	Intelligent analytics	Intelligent analytics	Intelligent analytics
Business Intelligence	-	People counting	People counting	-
Alarm I/O	1 / 1	-	-	1 / 1
Audio I/O	-	-	-	-
Video Compression	H.265 / H.264, MJPEG			
WiseStream	WiseStream II	WiseStream II	WiseStream II	WiseStream II
Streaming	Up to 3 Profiles			
Edge Storage	micro SD/SDHC/SDXC	micro SD/SDHC/SDXC	micro SD/SDHC/SDXC	micro SD/SDHC/SDXC
Application Programming Interface	ONVIF profile S/G/T, SUNAPI, Wisenet open platform			
Operating Temperature	-10°C ~ +50°C (+14°F ~ +122°F)	-10°C ~ +40°C (+14°F ~ +104°F)	-10°C ~ +40°C (+14°F ~ +104°F)	-30°C ~ +55°C (-22°F ~ +131°F) * Start up above -20°C (-4°F)
Certification	-	IP42, IK08	IP42, IK08	IP66, IK10
Power Consumption	PoE : Max 7.5W, typical 5.8W	PoE : Max 5W, typical 4W	PoE : Max 5W, typical 4W	PoE : Max 8.9W, typical 6.6W
Dimensions (WxHxD) / Weight	Ø110.6 x 89.5mm (Ø4.35" x 3.52") 360g (0.794lb)	Ø99 x 56mm (Ø3.9" x 2.2") 165g (0.364lb)	Ø99 x 56mm (Ø3.9" x 2.2") 165g (0.364lb)	Ø137 x 106.1mm (Ø5.39" x 4.18") 700g (1.543lb)
Additional Features	Hallway View	Super compact design, Hallway View	Super compact design, Hallway View	Hallway View



QNV-8020R
5MP IR Vandal Dome Camera



QNV-8010R
5MP IR Vandal Dome Camera



QNB-8002
5MP Box Camera



QNE-8011R
5MP IR Flateye Camera

Imaging Device	1/2.8" CMOS	1/2.8" CMOS	1/2.8" CMOS	1/2.8" CMOS
Resolution / Max. Frame Rate	5MP / 30fps	5MP / 30fps	5MP / 30fps	5MP / 30fps
Min. Illumination	Color: 0.15Lux (F1.6) B/W: 0Lux (IR LED on)	Color: 0.15Lux (F2.0) B/W: 0Lux (IR LED on)	Color: 0.07Lux (F1.2)	Color: 0.15Lux (F2.0) B/W: 0Lux (IR LED on)
Video Output	CVBS 1.0 Vp-p	CVBS 1.0 Vp-p	CVBS 1.0 Vp-p	-
Focal Length	4.0mm fixed	2.8mm fixed	-	2.8mm fixed
Angular Field of View	H: 79.8° / V: 58.1° / D: 105.9°	H: 104.7° / V: 76.5° / D: 136°	-	H: 104.4° V: 76.7° D: 136.1°
Pan / Tilt / Rotate	0° ~ 350° / 0° ~ 67° / 0° ~ 355°	0° ~ 350° / 0° ~ 67° / 0° ~ 355°	-	0° ~ 350° / 0° ~ 75° / 0° ~ 360°
IR Viewable Length	25m (82.02ft)	20m (65.62ft)	-	20m (65.62ft)
Day & Night	Auto (ICR)	Auto (ICR)	Auto (ICR)	Auto (ICR)
Wide Dynamic Range	120dB	120dB	120dB	120dB
Digital Noise Reduction	SSNR	SSNR	SSNR	SSNR
Digital Image Stabilization	-	-	-	-
Analytics	Intelligent analytics	Intelligent analytics	Intelligent analytics	Intelligent analytics
Business Intelligence	-	-	-	-
Alarm I/O	1 / 1	1 / 1	1 / 1	-
Audio I/O	-	-	Line in / Line out	-
Video Compression	H.265 / H.264, MJPEG	H.265 / H.264, MJPEG	H.265 / H.264, MJPEG	H.265 / H.264, MJPEG
WiseStream	WiseStream II	WiseStream II	WiseStream II	WiseStream II
Streaming	Up to 3 Profiles	Up to 3 Profiles	Up to 3 Profiles	Up to 3 Profiles
Edge Storage	micro SD/SDHC/SDXC	micro SD/SDHC/SDXC	micro SD/SDHC/SDXC	micro SD/SDHC/SDXC
Application Programming Interface	ONVIF profile S/G/T, SUNAPI, Wisenet open platform	ONVIF profile S/G/T, SUNAPI, Wisenet open platform	ONVIF profile S/G/T, SUNAPI, Wisenet open platform	ONVIF profile S/G/T, SUNAPI, Wisenet open platform
Operating Temperature	-30°C ~ +55°C (-22°F ~ +131°F) * Start up above -20°C (-4°F)	-30°C ~ +55°C (-22°F ~ +131°F) * Start up above -20°C (-4°F)	-10°C ~ +55°C (+14°F ~ +131°F)	-30°C ~ +55°C (-22°F ~ +131°F) * Start up above -20°C (-4°F)
Certification	IP66, IK10	IP66, IK10	-	IP67, IK10
Power Consumption	PoE: Max 7.2W, typical 5.4W	PoE: Max 7.5W, typical 5.8W	PoE: Max 6.4W, typical 4.6W 12VDC: Max 5.8W, typical 4.1W	PoE: Max 7.4W, typical 5.5W
Dimensions (WxHxD) / Weight	Ø120.3 x 91.7mm (Ø4.74" x 3.61") 510g (1.124lb)	Ø120.3 x 91.7mm (Ø4.74" x 3.61") 510g (1.124lb)	W73.8 x H66.6 x D136.2mm (2.91" x 2.62" x 5.36") 320g (0.71lb)	Ø125 x 87.35mm (Ø4.92" x 3.44") 645g (1.422lb)
Additional Features	Hallway View	Hallway View	Hallway View	Hallway View



QNO-7082R
4MP IR Bullet Camera



QNO-7022R
4MP IR Bullet Camera



QNO-7012R
4MP IR Bullet Camera

Imaging Device	1/3" CMOS	1/3" CMOS	1/3" CMOS
Resolution / Max. Frame Rate	4MP / 30fps	4MP / 30fps	4MP / 30fps
Min. Illumination	Color : 0.1Lux (F1.6, 1/30sec) B/W : 0Lux (IR LED On)	Color : 0.15Lux (F1.6, 1/30sec) B/W : 0Lux (IR LED On)	Color : 0.15Lux (F2.0, 1/30sec) B/W : 0Lux (IR LED On)
Video Output	CVBS 1.0 Vp-p	CVBS 1.0 Vp-p	CVBS 1.0 Vp-p
Focal Length	3.2~10mm (3.1x) motorized varifocal	4mm fixed focal	2.8mm fixed focal
Angular Field of View	H : 98.6° (Wide) ~ 30.8° (Tele) V : 52.3° (Wide) ~ 17.3° (Tele) D : 115.7° (Wide) ~ 35.3° (Tele)	H : 78.2° V : 41.2° D : 92°	H : 107.5° V : 59.7° D : 122°
Pan / Tilt / Rotate	-	-	-
IR Viewable Length	30m (98.42ft)	25m (82.02ft)	20m (65.62ft)
Day & Night	Auto (ICR)	Auto (ICR)	Auto (ICR)
Wide Dynamic Range	120dB	120dB	120dB
Digital Noise Reduction	SSNR	SSNR	SSNR
Digital Image Stabilization	-	-	-
Analytics	Motion detection, Tampering, Defocus detection, Virtual area (Intrusion/Enter/Exit), Virtual line (Crossing/Direction)	Motion detection, Tampering, Defocus detection, Virtual area (Intrusion/Enter/Exit), Virtual line (Crossing/Direction)	Motion detection, Tampering, Defocus detection, Virtual area (Intrusion/Enter/Exit), Virtual line (Crossing/Direction)
Business Intelligence	-	-	-
Alarm I/O	1/1	1/1	1/1
Audio I/O	Line in / -	Selectable (mic in/line in) / -	Selectable (mic in/line in) / -
Video Compression	H.265 / H.264, MJPEG	H.265 / H.264, MJPEG	H.265 / H.264, MJPEG
WiseStream	WiseStream II	WiseStream II	WiseStream II
Streaming	Up to 3 Profiles	Up to 3 Profiles	Up to 3 Profiles
Edge Storage	micro SD/SDHC/SDXC 1slot 128GB	micro SD/SDHC/SDXC 1slot 128GB	micro SD/SDHC/SDXC 1slot 128GB
Application Programming Interface	ONVIF Profile S/G/T, SUNAPI (HTTP API)	ONVIF Profile S/G/T, SUNAPI (HTTP API)	ONVIF Profile S/G/T, SUNAPI (HTTP API)
Operating Temperature	-40°C ~ +55°C (-40°F ~ +131°F) / 0~95% RH * Start up should be done at -30°C or above	-40°C ~ +55°C (-40°F ~ +131°F) / 0~95% RH * Start up should be done at -30°C or above	-40°C ~ +55°C (-40°F ~ +131°F) / 0~95% RH * Start up should be done at -30°C or above
Certification	IP66, IK10	IP66, IK10	IP66, IK10
Power Consumption	PoE: Max 11.4W, typical 8W 12VDC: Max 9.6W, typical 7W	PoE: Max 10.7W, typical 8W 12VDC: Max 9.1W, typical 6.8W	PoE: Max 10.7W, typical 8W 12VDC: Max 9.1W, typical 6.8W
Dimensions (WxHxD) / Weight	Ø78 x 259.8mm (Ø3.07" x 10.23") 900g (1.984lb)	Ø70 x 246mm (Ø2.76" x 9.69") 700g (1.543lb)	Ø70 x 246mm (Ø2.76" x 9.69") 700g (1.543lb)



QNO-6082R/6082R1
2MP IR Bullet Camera



QNO-6072R/6072R1
2MP IR Bullet Camera



QNO-6022R/6022R1
2MP IR Bullet Camera



QNO-6012R/6012R1
2MP IR Bullet Camera

Imaging Device	1/2.8" CMOS		1/2.8" CMOS		1/2.8" CMOS		1/2.8" CMOS	
Resolution / Max. Frame Rate	2MP / 30fps		2MP / 30fps		2MP / 30fps		2MP / 30fps	
Min. Illumination	Color : 0.03Lux (F1.6) B/W : 0Lux (IR LED on)		Color : 0.03Lux (F1.6) B/W : 0Lux (IR LED on)		Color : 0.03Lux (F1.6) B/W : 0Lux (IR LED on)		Color : 0.03Lux (F2.0) B/W : 0Lux (IR LED on)	
Video Output	CVBS 1.0 Vp-p		CVBS 1.0 Vp-p		CVBS 1.0 Vp-p		CVBS 1.0 Vp-p	
Focal Length	3.2 ~ 10mm (3.1x) motorized varifocal		3.2 ~ 10mm (3.1x) manual varifocal		4mm fixed		2.8mm fixed	
Angular Field of View	H: 109° (Wide) ~ 33.2° (Tele) V: 57.4° (Wide) ~ 18.7° (Tele) D: 132° (Wide) ~ 38° (Tele)		H: 109° (Wide) ~ 33.2° (Tele) V: 57.4° (Wide) ~ 18.7° (Tele) D: 132° (Wide) ~ 38° (Tele)		H: 87.6° / V: 46.4° / D: 104.5°		H: 113.74° / V: 61.5° / D: 134.45°	
Pan / Tilt / Rotate	-		-		-		-	
IR Viewable Length	30m (98.43ft)		30m (98.43ft)		25m (82.02ft)		20m (65.62ft)	
Day & Night	Auto (ICR)		Auto (ICR)		Auto (ICR)		Auto (ICR)	
Wide Dynamic Range	120dB		120dB		120dB		120dB	
Digital Noise Reduction	SSNR		SSNR		SSNR		SSNR	
Digital Image Stabilization	-		-		-		-	
Analytics	Intelligent analytics		Intelligent analytics		Intelligent analytics		Intelligent analytics	
Business Intelligence	-		-		-		-	
Alarm I/O	1 / 1		1 / 1		1 / 1		1 / 1	
Audio I/O	Selectable (mic in/line in)	-	Selectable (mic in/line in)	-	Selectable (mic in/line in)	-	Selectable (mic in/line in)	-
Video Compression	H.265 / H.264, MJPEG		H.265 / H.264, MJPEG		H.265 / H.264, MJPEG		H.265 / H.264, MJPEG	
WiseStream	WiseStream II		WiseStream II		WiseStream II		WiseStream II	
Streaming	Up to 3 Profiles		Up to 3 Profiles		Up to 3 Profiles		Up to 3 Profiles	
Edge Storage	micro SD/SDHC/SDXC		micro SD/SDHC/SDXC		micro SD/SDHC/SDXC		micro SD/SDHC/SDXC	
Application Programming Interface	ONVIF profile S/G/T, SUNAPI, Wisenet open platform		ONVIF profile S/G/T, SUNAPI, Wisenet open platform		ONVIF profile S/G/T, SUNAPI, Wisenet open platform		ONVIF profile S/G/T, SUNAPI, Wisenet open platform	
Operating Temperature	-30°C ~ +55°C (-22°F ~ +131°F) * Start up above -20°C (-4°F)		-30°C ~ +55°C (-22°F ~ +131°F) * Start up above -20°C (-4°F)		-30°C ~ +55°C (-22°F ~ +131°F) * Start up above -20°C (-4°F)		-30°C ~ +55°C (-22°F ~ +131°F) * Start up above -20°C (-4°F)	
Certification	IP66, IK10		IP66, IK10		IP66, IK10		IP66, IK10	
Power Consumption	PoE: Max 7.4W, typical 5.4W 12VDC: Max 6.5W, typical 4.8W		PoE: Max 7.4W, typical 5.4W 12VDC: Max 6.5W, typical 4.8W		PoE: Max 7W, typical 5.2W 12VDC: Max 6.1W, typical 4.5W		PoE: Max 7W, typical 5.2W 12VDC: Max 6.1W, typical 4.5W	
Dimensions (WxHxD) / Weight	Ø78 x 259.8mm (Ø3.07" x 10.23") 900g (1.984lb)		Ø70 x 246mm (Ø2.76" x 9.69") 730g (1.609lb)		Ø70 x 246mm (Ø2.76" x 9.69") 700g (1.543lb)		Ø70 x 246mm (Ø2.76" x 9.69") 700g (1.543lb)	
Additional Features	Hallway View		Hallway View		Hallway View		Hallway View	



QND-7082R
4MP IR Dome Camera



QND-7022R
4MP IR Dome Camera



QND-7012R
4MP IR Dome Camera

Imaging Device	1/3" CMOS	1/3" CMOS	1/3" CMOS
Resolution / Max. Frame Rate	4MP / 30fps	4MP / 30fps	4MP / 30fps
Min. Illumination	Color: 0.1Lux (F1.6, 1/30sec) B/W: 0Lux (IR LED On)	Color: 0.15Lux (F2.0, 1/30sec) B/W: 0Lux (IR LED On)	Color: 0.15Lux (F2.0, 1/30sec) B/W: 0Lux (IR LED On)
Video Output	CVBS 1.0 Vp-p	CVBS 1.0 Vp-p	CVBS 1.0 Vp-p
Focal Length	3.2~10mm (3.1x) motorized varifocal	4mm fixed focal	2.8mm fixed focal
Angular Field of View	H: 98.6° (Wide) ~ 30.8° (Tele) V: 52.3° (Wide) ~ 17.3° (Tele) D: 115.7° (Wide) ~ 35.3° (Tele)	H: 78.2° V: 41.2° D: 92°	H: 107.5° V: 59.7° D: 122°
Pan / Tilt / Rotate	0° ~ 350° / 0° ~ 67° / 0° ~ 355°	0° ~ 350° / 0° ~ 67° / 0° ~ 355°	0° ~ 350° / 0° ~ 67° / 0° ~ 355°
IR Viewable Length	20m (65.62ft)	20m (65.62ft)	20m (65.62ft)
Day & Night	Auto (ICR)	Auto (ICR)	Auto (ICR)
Wide Dynamic Range	120dB	120dB	120dB
Digital Noise Reduction	SSNR	SSNR	SSNR
Digital Image Stabilization	-	-	-
Analytics	Motion detection, Tampering, Defocus detection, Virtual area(Intrusion/Enter/Exit), Virtual line(Crossing/Direction)	Motion detection, Tampering, Defocus detection, Virtual area(Intrusion/Enter/Exit), Virtual line(Crossing/Direction)	Motion detection, Tampering, Defocus detection, Virtual area(Intrusion/Enter/Exit), Virtual line(Crossing/Direction)
Business Intelligence	-	-	-
Alarm I/O	1/1	1/1	1/1
Audio I/O	Built-in mic / -	Built-in mic / -	Built-in mic / -
Video Compression	H.265 / H.264, MJPEG	H.265 / H.264, MJPEG	H.265 / H.264, MJPEG
WiseStream	WiseStream II	WiseStream II	WiseStream II
Streaming	Up to 3 Profiles	Up to 3 Profiles	Up to 3 Profiles
Edge Storage	micro SD/SDHC/SDXC 1slot 128GB	micro SD/SDHC/SDXC 1slot 128GB	micro SD/SDHC/SDXC 1slot 128GB
Application Programming Interface	ONVIF Profile S/G/T, SUNAPI (HTTP API)	ONVIF Profile S/G/T, SUNAPI (HTTP API)	ONVIF Profile S/G/T, SUNAPI (HTTP API)
Operating Temperature	-10°C ~ +55°C (+14°F ~ +131°F) / 0~95% RH	-10°C ~ +55°C (+14°F ~ +131°F) / 0~95% RH	-10°C ~ +55°C (+14°F ~ +131°F) / 0~95% RH
Certification	-	-	-
Power Consumption	PoE: Max 8.6W, typical 6.3W 12VDC: Max 7.6W, typical 5.4W	PoE: Max 7.9W, typical 6.1W 12VDC: Max 7.1W, typical 5.1W	PoE: Max 7.9W, typical 6.1W 12VDC: Max 7.1W, typical 5.1W
Dimensions (WxHxD) / Weight	Ø119.8 x 98.8mm (Ø4.72" x 3.89") 320g (0.705lb)	Ø110 x 86mm (Ø4.33" x 3.39") 255g (0.562lb)	Ø110 x 86mm (Ø4.33" x 3.39") 255g (0.562lb)



QND-6082R/6082R1
2MP IR Dome Camera



QND-6072R/6072R1
2MP IR Dome Camera



QND-6022R/6022R1
2MP IR Dome Camera



QND-6012R/6012R1
2MP IR Dome Camera

Imaging Device	1/2.8" CMOS		1/2.8" CMOS		1/2.8" CMOS		1/2.8" CMOS	
Resolution / Max. Frame Rate	2MP / 30fps		2MP / 30fps		2MP / 30fps		2MP / 30fps	
Min. Illumination	Color: 0.03Lux (F1.6) B/W: 0Lux (IR LED on)		Color: 0.03Lux (F1.6) B/W: 0Lux (IR LED on)		Color: 0.03Lux (F1.6) B/W: 0Lux (IR LED on)		Color: 0.03Lux (F2.0) B/W: 0Lux (IR LED on)	
Video Output	CVBS 1.0 Vp-p		CVBS 1.0 Vp-p		CVBS 1.0 Vp-p		CVBS 1.0 Vp-p	
Focal Length	3.2~10mm (3.1x) motorized varifocal		3.2~10mm (3.1x) manual varifocal		4mm fixed		2.8mm fixed	
Angular Field of View	H: 109° (Wide)~33.2° (Tele) V: 57.4° (Wide)~18.7° (Tele) D: 132° (Wide)~38° (Tele)		H: 109° (Wide)~33.2° (Tele) V: 57.4° (Wide)~18.7° (Tele) D: 132° (Wide)~38° (Tele)		H: 87.6° / V: 46.4° / D: 104.5°		H: 113.74° / V: 61.5° / D: 134.45°	
Pan / Tilt / Rotate	0°~350° / 0°~67° / 0°~355°		0°~350° / 0°~67° / 0°~355°		0°~350° / 0°~67° / 0°~355°		0°~350° / 0°~67° / 0°~355°	
IR Viewable Length	20m (65.62ft)		20m (65.62ft)		20m (65.62ft)		20m (65.62ft)	
Day & Night	Auto (ICR)		Auto (ICR)		Auto (ICR)		Auto (ICR)	
Wide Dynamic Range	120dB		120dB		120dB		120dB	
Digital Noise Reduction	SSNR		SSNR		SSNR		SSNR	
Digital Image Stabilization	-		-		-		-	
Analytics	Intelligent analytics		Intelligent analytics		Intelligent analytics		Intelligent analytics	
Business Intelligence	-		-		-		-	
Alarm I/O	1 / 1		1 / 1		1 / 1		1 / 1	
Audio I/O	Built-in mic	-	Built-in mic	-	Built-in mic	-	Built-in mic	-
Video Compression	H.265 / H.264, MJPEG		H.265 / H.264, MJPEG		H.265 / H.264, MJPEG		H.265 / H.264, MJPEG	
WiseStream	WiseStream II		WiseStream II		WiseStream II		WiseStream II	
Streaming	Up to 3 Profiles		Up to 3 Profiles		Up to 3 Profiles		Up to 3 Profiles	
Edge Storage	micro SD/SDHC/SDXC		micro SD/SDHC/SDXC		micro SD/SDHC/SDXC		micro SD/SDHC/SDXC	
Application Programming Interface	ONVIF profile S/G/T, SUNAPI, Wisenet open platform		ONVIF profile S/G/T, SUNAPI, Wisenet open platform		ONVIF profile S/G/T, SUNAPI, Wisenet open platform		ONVIF profile S/G/T, SUNAPI, Wisenet open platform	
Operating Temperature	-10°C ~ +55°C (+14°F ~ +131°F)		-10°C ~ +55°C (+14°F ~ +131°F)		-10°C ~ +55°C (+14°F ~ +131°F)		-10°C ~ +55°C (+14°F ~ +131°F)	
Certification	-		-		-		-	
Power Consumption	PoE: Max 7.7W, typical 6W 12VDC: Max 6.5W, typical 5.1W		PoE: Max 7.7W, typical 6W 12VDC: Max 6.5W, typical 5.1W		PoE: Max 7.4W, typical 6W 12VDC: Max 6.4W, typical 5.1W		PoE: Max 7.4W, typical 6W 12VDC: Max 6.4W, typical 5.1W	
Dimensions (WxHxD) / Weight	Ø 119.8 x 98.8mm (Ø 4.72" x 3.89") 320g (0.705lb)		Ø 119.8 x 98.8mm (Ø 4.72" x 3.89") 320g (0.705lb)		Ø 110 x 86mm (Ø 4.33" x 3.39") 255g (0.562lb)		Ø 110 x 86mm (Ø 4.33" x 3.39") 255g (0.562lb)	
Additional Features	Hallway View		Hallway View		Hallway View		Hallway View	

Q mini


QND-6021
2MP Dome Camera

Q mini


QND-6011
2MP Dome Camera

QNV-7082R
4MP IR Vandal Dome Camera

Imaging Device	1/2.8" CMOS	1/2.8" CMOS	1/3" CMOS
Resolution / Max. Frame Rate	2MP / 30fps	2MP / 30fps	4MP / 30fps
Min. Illumination	Color : 0.03Lux (F1.6)	Color : 0.03Lux (F2.0)	Color : 0.1Lux (F1.6, 1/30sec) B/W : 0Lux (IR LED On)
Video Output	-	-	CVBS 1.0 Vp-p
Focal Length	4mm fixed	2.8mm fixed	3.2~10mm (3.1x) motorized varifocal
Angular Field of View	H : 87.6° / V : 46.4° / D : 104.5°	H : 113.74° / V : 61.5° / D : 134.45°	H : 98.6° (Wide) ~ 30.8° (Tele) V : 52.3° (Wide) ~ 17.3° (Tele) D : 115.7° (Wide) ~ 35.3° (Tele)
Pan / Tilt / Rotate	0° ~ 350° / 0° ~ 69° / 0° ~ 355°	0° ~ 350° / 0° ~ 69° / 0° ~ 355°	0° ~ 350° / 0° ~ 67° / 0° ~ 355°
IR Viewable Length	-	-	30m (98.42ft)
Day & Night	Auto (Electrical)	Auto (Electrical)	Auto (ICR)
Wide Dynamic Range	120dB	120dB	120dB
Digital Noise Reduction	SSNR	SSNR	SSNR
Digital Image Stabilization	-	-	-
Analytics	Intelligent analytics	Intelligent analytics	Intelligent analytics
Business Intelligence	People counting	People counting	-
Alarm I/O	-	-	1 / 1
Audio I/O	-	-	Line in / -
Video Compression	H.265 / H.264, MJPEG	H.265 / H.264, MJPEG	H.265 / H.264, MJPEG
WiseStream	WiseStream II	WiseStream II	WiseStream II
Streaming	Up to 3 Profiles	Up to 3 Profiles	Up to 3 Profiles
Edge Storage	micro SD/SDHC/SDXC	micro SD/SDHC/SDXC	micro SD/SDHC/SDXC 1slot 128GB
Application Programming Interface	ONVIF profile S/G/T, SUNAPI, Wisenet open platform	ONVIF profile S/G/T, SUNAPI, Wisenet open platform	ONVIF Profile S/G/T, SUNAPI (HTTP API)
Operating Temperature	-10°C ~ +55°C (+14°F ~ +131°F)	-10°C ~ +55°C (+14°F ~ +131°F)	-40°C ~ +55°C (-40°F ~ +131°F) / 0~95% RH * Start up should be done at -30°C or above
Certification	IP42, IK08	IP42, IK08	IP66, IK10
Power Consumption	PoE : Max 4.8W, typical 2.8W	PoE : Max 4.8W, typical 2.8W	PoE : Max 11.4W, typical 8.5W 12VDC : Max 9.6W, typical 7.2W
Dimensions (WxHxD) / Weight	Ø99 x 56mm (Ø3.9" x 2.2") 145g (0.320lb)	Ø99 x 56mm (Ø3.9" x 2.2") 145g (0.320lb)	Ø137 x 106.1mm (Ø5.39" x 4.18") 710g (1.565lb)
Additional Features	Super compact design, Hallway View	Super compact design, Hallway View	Defocus detection, Directional detection, Motion detection, Enter/Exit, Tampering, Virtual line



QNV-7022R
4MP IR Vandal Dome Camera



QNV-7012R
4MP IR Vandal Dome Camera



QNV-6082R/6082R1
2MP IR Vandal Dome Camera



QNV-6072R/6072R1
2MP IR Vandal Dome Camera

Imaging Device	1/3" CMOS	1/3" CMOS	1/2.8" CMOS	1/2.8" CMOS
Resolution / Max. Frame Rate	4MP / 30fps	4MP / 30fps	2MP / 30fps	2MP / 30fps
Min. Illumination	Color: 0.15Lux (F1.6, 1/30sec) B/W: 0Lux (IR LED On)	Color: 0.15Lux (F2.0, 1/30sec) B/W: 0Lux (IR LED On)	Color: 0.03Lux (F1.6) B/W: 0Lux (IR LED on)	Color: 0.03Lux (F1.6) B/W: 0Lux (IR LED on)
Video Output	CVBS 1.0 Vp-p	CVBS 1.0 Vp-p	CVBS 1.0 Vp-p	CVBS 1.0 Vp-p
Focal Length	4mm fixed focal	2.8mm fixed focal	3.2 ~ 10mm (3.1x) motorized varifocal	3.2 ~ 10mm (3.1x) manual varifocal
Angular Field of View	H: 78.2° / V: 41.2° / D: 92°	H: 78.2° / V: 41.2° / D: 92°	H: 109° (Wide) ~ 33.2° (Tele) V: 57.4° (Wide) ~ 18.7° (Tele) D: 132° (Wide) ~ 38° (Tele)	H: 109° (Wide) ~ 33.2° (Tele) V: 57.4° (Wide) ~ 18.7° (Tele) D: 132° (Wide) ~ 38° (Tele)
Pan / Tilt / Rotate	0° ~ 350° / 0° ~ 67° / 0° ~ 355°	0° ~ 350° / 0° ~ 67° / 0° ~ 355°	0° ~ 350° / 0° ~ 67° / 0° ~ 355°	0° ~ 350° / 0° ~ 67° / 0° ~ 355°
IR Viewable Length	25m (82.02ft)	20m (65.62ft)	30m (98.42ft)	30m (98.42ft)
Day & Night	Auto (ICR)	Auto (ICR)	Auto (ICR)	Auto (ICR)
Wide Dynamic Range	120dB	120dB	120dB	120dB
Digital Noise Reduction	SSNR	SSNR	SSNR	SSNR
Digital Image Stabilization	-	-	-	-
Analytics	Intelligent analytics	Intelligent analytics	Intelligent analytics	Intelligent analytics
Business Intelligence	-	-	-	-
Alarm I/O	1 / 1	1 / 1	1 / 1	1 / 1
Audio I/O	Selectable (mic in/line in) / -	Selectable (mic in/line in) / -	Selectable (mic in/line in) / -	Selectable (mic in/line in) / -
Video Compression	H.265 / H.264, MJPEG	H.265 / H.264, MJPEG	H.265 / H.264, MJPEG	H.265 / H.264, MJPEG
WiseStream	WiseStreamII II	WiseStreamII II	WiseStreamII II	WiseStreamII II
Streaming	Up to 3 Profiles	Up to 3 Profiles	Up to 3 Profiles	Up to 3 Profiles
Edge Storage	micro SD/SDHC/SDXC 1 slot 128GB	micro SD/SDHC/SDXC 1 slot 128GB	micro SD/SDHC/SDXC	micro SD/SDHC/SDXC
Application Programming Interface	ONVIF Profile S/G/T, SUNAPI (HTTP API)	ONVIF Profile S/G/T, SUNAPI (HTTP API)	ONVIF profile S/G/T, SUNAPI, Wisenet open platform	ONVIF profile S/G/T, SUNAPI, Wisenet open platform
Operating Temperature	-40°C ~ +55°C (-40°F ~ +131°F) / 0~95% RH * Start up should be done at -30°C or above	-40°C ~ +55°C (-40°F ~ +131°F) / 0~95% RH * Start up should be done at -30°C or above	-30°C ~ +55°C (-22°F ~ +131°F) * Start up above -20°C (-4°F)	-30°C ~ +55°C (-22°F ~ +131°F) * Start up above -20°C (-4°F)
Certification	IP66, IK10	IP66, IK10	IP66, IK10	IP66, IK10
Power Consumption	PoE: Max 10.7W, typical 8.1W 12VDC: Max 9.1W, typical 6.5W	PoE: Max 10.7W, typical 8.1W 12VDC: Max 9.1W, typical 6.5W	PoE: Max 7.7W, typical 6W 12VDC: Max 6.5W	PoE: Max 7.7W, typical 6W 12VDC: Max 6.5W
Dimensions (WxHxD) / Weight	Ø 120.3 x 91.7mm (Ø 4.74" x 3.61") 510g (1.124 lb)	Ø 120.3 x 91.7mm (Ø 4.74" x 3.61") 510g (1.124 lb)	Ø 137 x 106.1mm (Ø 5.39" x 4.18") 710g (1.565 lb)	Ø 137 x 106.1mm (Ø 5.39" x 4.18") 710g (1.565 lb)
Additional Features	Defocus detection, Directional detection, Motion detection, Enter/Exit, Tampering, Virtual line	Defocus detection, Directional detection, Motion detection, Enter/Exit, Tampering, Virtual line	Hallway View	Hallway View



QNV-6022R/6022R1
2MP IR Vandal Dome Camera



QNV-6012R/6012R1
2MP IR Vandal Dome Camera



QNV-6024RM
2MP IR Flat Camera



QNP-6320
2MP 32x PTZ Camera

Imaging Device	1/2.8" CMOS		1/2.8" CMOS		1/2.8" CMOS		1/2.8" CMOS	
Resolution / Max. Frame Rate	2MP / 30fps		2MP / 30fps		2MP / 30fps		2MP / 60fps	
Min. Illumination	Color: 0.03Lux (F1.6) B/W: 0Lux (IR LED on)		Color: 0.03Lux (F2.0) B/W: 0Lux (IR LED on)		Color: 0.03Lux (F2.0) B/W: 0Lux (IR LED on)		Color: 0.05Lux (F1.6, 1/30sec) BW: 0.005Lux (F1.6, 1/30sec)	
Video Output	CVBS 1.0 Vp-p		CVBS 1.0 Vp-p		CVBS 1.0 Vp-p		-	
Focal Length	4mm fixed		2.8mm fixed		3.6mm fixed		4.44~142.6mm (32x) zoom	
Angular Field of View	H: 87.6° / V: 46.4° / D: 104.5°		H: 113.74° / V: 61.5° / D: 134.45°		H: 94.8° / V: 49.3° / D: 114.3°		H: 64.66° (Wide)~2.29° (Tele) V: 38.08° (Wide)~1.30° (Tele)	
Pan / Tilt / Rotate	0° ~ 350° / 0° ~ 67° / 0° ~ 355°		0° ~ 350° / 0° ~ 67° / 0° ~ 355°		± 5° / 0~67° / ± 90°		-	
IR Viewable Length	25m (82.02ft)		20m (65.62ft)		15m (49.21ft)		-	
Day & Night	Auto (ICR)		Auto (ICR)		Auto (ICR)		Auto (ICR)	
Wide Dynamic Range	120dB		120dB		120dB		120dB	
Digital Noise Reduction	SSNR		SSNR		SSNR		SSNR V	
Digital Image Stabilization	-		-		-		Support (built-in gyro sensor)	
Analytics	Intelligent analytics		Intelligent analytics		Intelligent analytics		Directional detection, Motion detection, Enter/Exit, Tampering, Virtual line, Audio detection	
Business Intelligence	-		-		-		-	
Alarm I/O	1 / 1		1 / 1		-		4 / 2	
Audio I/O	Selectable (mic in/line in)	-	Selectable (mic in/line in)	-	Selectable(mic in/line in/built-in mic)/ Line out		Selectable (mic in/line in) / Line out	
Video Compression	H.265 / H.264, MJPEG		H.265 / H.264, MJPEG		H.265 / H.264, MJPEG		H.265 / H.264, MJPEG	
WiseStream	WiseStream II		WiseStream II		WiseStream II		WiseStream II	
Streaming	Up to 3 Profiles		Up to 3 Profiles		Up to 3 Profiles		Up to 10 profiles	
Edge Storage	micro SD/SDHC/SDXC		micro SD/SDHC/SDXC		micro SD/SDHC/SDXC		micro SD/SDHC/SDXC 1slot 256GB	
Application Programming Interface	ONVIF profile S/G/T, SUNAPI, Wisenet open platform		ONVIF profile S/G/T, SUNAPI, Wisenet open platform		ONVIF profile S/G/T, SUNAPI, Wisenet open platform		ONVIF Profile S/G/T, SUNAPI (HTTP API), Wisenet open platform	
Operating Temperature	-30°C ~ +55°C (-22°F ~ +131°F) * Start up above -20°C (-4°F)		-30°C ~ +55°C (-22°F ~ +131°F) * Start up above -20°C (-4°F)		-30°C ~ +55°C (-22°F ~ +131°F)		-10°C ~ +55°C (+14°F ~ +131°F) / 0~95% RH	
Certification	IP66, IK10		IP66, IK10		IP66, IK10, NEMA4X		-	
Power Consumption	PoE: Max 7.4W, typical 6W 12VDC: Max 6.4W		PoE: Max 7.4W, typical 6W 12VDC: Max 6.4W		PoE: Max 6.7W, typical 5W		Max. 14.5W, Typ. 12W	
Dimensions (WxHxD) / Weight	Ø120.3 x 91.7mm (Ø4.74" x 3.61") 510g (1.124lb)		Ø120.3 x 91.7mm (Ø4.74" x 3.61") 510g (1.124lb)		W98.9 x H52 x D100mm (3.89" x 2.05" x 3.94") 295g (0.65lb)		Ø152 x 218mm (Ø5.98" x 8.58") 1.7kg (3.75lb)	
Additional Features	Hallway View		Hallway View		M12 connector, Hallway View		Auto tracking(Based on MD)	



QNP-6320R
2MP 32x IR PTZ Camera



QNP-6320H
2MP 32x PTZ Camera



QNP-6250
2MP 25x PTZ Camera



QNP-6250R
2MP 25x IR PTZ Camera

Imaging Device	1/2.8" CMOS	1/2.8" CMOS	1/2.8" CMOS	1/2.8" CMOS
Resolution / Max. Frame Rate	2MP / 60fps	2MP / 60fps	2MP / 60fps	2MP / 60fps
Min. Illumination	Color: 0.05Lux (F1.6, 1/30sec) BW: 0Lux (IR LED On)	Color: 0.05Lux (F1.6, 1/30sec) BW: 0.005Lux (F1.6, 1/30sec)	Color: 0.05Lux (F1.6, 1/30sec) BW: 0.005Lux (F1.6, 1/30sec)	Color: 0.05Lux (F1.6, 1/30sec) BW: 0Lux (IR LED On)
Video Output	-	-	-	-
Focal Length	4.44 ~ 142.6mm (32x) zoom	4.44 ~ 142.6mm (32x) zoom	4.44 ~ 111mm (25x) zoom	4.44 ~ 111mm (25x) zoom
Angular Field of View	H: 64.66° (Wide) ~ 2.29° (Tele) V: 38.08° (Wide) ~ 1.3° (Tele)	H: 64.66° (Wide) ~ 2.29° (Tele) V: 38.08° (Wide) ~ 1.3° (Tele)	H: 64.66° (Wide) ~ 2.99° (Tele) V: 38.08° (Wide) ~ 1.68° (Tele)	H: 64.66° (Wide) ~ 2.99° (Tele) V: 38.08° (Wide) ~ 1.68° (Tele)
Pan / Tilt / Rotate	-	-	-	-
IR Viewable Length	100m (328.08ft)	-	-	-
Day & Night	Auto (ICR)	Auto (ICR)	Auto (ICR)	Auto (ICR)
Wide Dynamic Range	120dB	120dB	120dB	120dB
Digital Noise Reduction	SSNR V	SSNR V	SSNR V	SSNR V
Digital Image Stabilization	Support (built-in gyro sensor)	Support (built-in gyro sensor)	Support (built-in gyro sensor)	Support (built-in gyro sensor)
Analytics	Directional detection, Motion detection, Enter/Exit, Tampering, Virtual line * Audio detection (with NWI/O Box)	Directional detection, Motion detection, Enter/Exit, Tampering, Virtual line * Audio detection (with NWI/O Box)	Directional detection, Motion detection, Enter/Exit, Tampering, Virtual line, Audio detection	Directional detection, Motion detection, Enter/Exit, Tampering, Virtual line * Audio detection (with NWI/O Box)
Business Intelligence	-	-	-	-
Alarm I/O	Compatible with NWI/O Box (Optional)	Compatible with NWI/O Box (Optional)	4 / 2	Compatible with NWI/O Box (Optional)
Audio I/O	Compatible with NWI/O Box (Optional)	Compatible with NWI/O Box (Optional)	Selectable (mic in/line in) / Line out	Compatible with NWI/O Box (Optional)
Video Compression	H.265 / H.264, MJPEG	H.265 / H.264, MJPEG	H.265 / H.264, MJPEG	H.265 / H.264, MJPEG
WiseStream	WiseStream II	WiseStream II	WiseStream II	WiseStream II
Streaming	Up to 10 profiles	Up to 10 profiles	Up to 10 profiles	Up to 10 profiles
Edge Storage	micro SD/SDHC/SDXC 1 slot 256GB	micro SD/SDHC/SDXC 1 slot 256GB	micro SD/SDHC/SDXC 1 slot 256GB	micro SD/SDHC/SDXC 1 slot 256GB
Application Programming Interface	ONVIF Profile S/G/T SUNAPI (HTTP API) Wisenet open platform	ONVIF Profile S/G/T SUNAPI (HTTP API) Wisenet open platform	ONVIF Profile S/G/T SUNAPI (HTTP API) Wisenet open platform	ONVIF Profile S/G/T SUNAPI (HTTP API) Wisenet open platform
Operating Temperature	Normal: -35°C ~ +55°C (-31°F ~ +131°F) / * Start up should be done at above -30°C 0~95% RH (Non-condensing)	Normal: -35°C ~ +55°C (-31°F ~ +131°F) / * Start up should be done at above -30°C 0~95% RH (Non-condensing)	-10°C ~ +55°C (+14°F ~ +131°F) / 0~95% RH	Normal: -35°C ~ +55°C (-31°F ~ +131°F) / * Start up should be done at above -30°C 0~95% RH (Non-condensing)
Certification	IP66, IK10, NEMA4X	IP66, IK10, NEMA4X	-	IP66, IK10, NEMA4X
Power Consumption	Max. 25.5W, Typ. 14.7W	Max. 23W, Typ. 14W	Max. 14.5W, Typ. 12W	Max. 25.5W, Typ. 14.7W
Dimensions (WxHxD) / Weight	Ø158 x 293.3mm 3.1kg (6.83lb)	Ø204.3 x 265mm (Ø8.04" x 10.43") 2.7kg (5.95lb)	Ø152 x 218mm (Ø5.98" x 8.58") 1.7kg (3.75lb)	Ø158 x 293.3mm 3.1kg (6.83lb)
Additional Features	Auto tracking (Based on MD)	Auto tracking (Based on MD)	Auto tracking (Based on MD)	Auto tracking (Based on MD)



QNP-6250H
2MP 25x PTZ Camera



QNP-6320HS
2MP 32x PTZ Camera



QNB-6002
2MP Box Camera



QNF-9010
12MP Fisheye Camera



QNF-8010
6MP Fisheye Camera

Imaging Device	1/2.8" CMOS	1/2.8" CMOS	1/2.8" CMOS	1/2.3" CMOS	1/1.8" CMOS
Resolution / Max. Frame Rate	2MP / 60fps	2MP / 60fps	2MP / 30fps	9MP / 30fps	4MP / 30fps
Min. Illumination	Color: 0.05Lux (F1.6, 1/30sec) BW: 0.005Lux (F1.6, 1/30sec)	Color: 0.05Lux (F1.6, 1/30sec) BW: 0.005Lux (F1.6, 1/30sec)	Color: 0.01Lux (F1.2)	Color: 0.39Lux (F2.2, 1/30sec)	Color: 0.2Lux (F2.5)
Video Output	-	-	CVBS 1.0 Vp-p	CVBS 1.0 Vp-p	CVBS 1.0 Vp-p
Focal Length	4.44~111mm (25x) zoom	4.44~142.6mm (32x) zoom	-	1.08mm fixed	1.14mm fixed
Angular Field of View	H: 64.66° (Wide) ~ 2.99° (Tele) V: 38.08° (Wide) ~ 1.68° (Tele)	H: 64.66° (Wide) ~ 2.29° (Tele) V: 38.08° (Wide) ~ 1.30° (Tele)	-	H: 187° / V: 187° / D: 187°	H: 187° / V: 187° / D: 187°
Pan / Tilt / Rotate	-	-	-	-	-
IR Viewable Length	-	-	-	-	-
Day & Night	Auto (ICR)	Auto (ICR)	Auto (ICR)	Auto (Electrical)	Auto (Electrical)
Wide Dynamic Range	120dB	120dB	120dB	120dB	120dB
Digital Noise Reduction	SSNR V	SSNR V	SSNR	SSNR V	SSNR V
Digital Image Stabilization	Support (built-in gyro sensor)	Support (built-in gyro sensor)	-	-	-
Analytics	Directional detection, Motion detection, Enter/Exit, Tampering, Virtual line * Audio detection (with NWI/O Box)	Directional detection, Motion detection, Enter/Exit, Tampering, Virtual line * Audio detection (with NWI/O Box)	Intelligent analytics	Defocus detection, Motion detection, Tampering	Intelligent analytics
Business Intelligence	-	-	-	People counting, Heatmap	People counting, Heatmap
Alarm I/O	Compatible with NWI/O Box (Optional)	Compatible with NWI/O Box (Optional)	1 / 1	-	-
Audio I/O	Compatible with NWI/O Box (Optional)	Compatible with NWI/O Box (Optional)	Line in / Line out	-	-
Video Compression	H.265 / H.264, MJPEG	H.265/H.264, MJPEG	H.265 / H.264, MJPEG	H.265 / H.264, MJPEG	H.265 / H.264, MJPEG
WiseStream	WiseStream II	WiseStream II	WiseStream II	WiseStream II	WiseStream II
Streaming	Up to 10 profiles	Up to 10 profiles	Up to 3 Profiles	Up to 3 profiles	Up to 3 profiles
Edge Storage	micro SD/SDHC/SDXC 1slot 256GB	micro SD/SDHC/SDXC 1slot 256GB	micro SD/SDHC/SDXC	micro SD/SDHC/SDXC	micro SD/SDHC/SDXC
Application Programming Interface	ONVIF Profile S/G/T SUNAPI (HTTP API) Wisenet open platform	ONVIF Profile S/G/T SUNAPI (HTTP API) Wisenet open platform	ONVIF profile S/G/T, SUNAPI, Wisenet open platform	ONVIF profile S/G/T, SUNAPI, Wisenet open platform	ONVIF profile S/G, SUNAPI, Wisenet open platform
Operating Temperature	-35°C ~ +55°C (-31°F ~ +131°F) / * Start up should be done at above -30°C 0~95% RH (Non-condensing)	-35°C ~ +55°C (-31°F ~ +131°F) / * Start up should be done at above -25°C 0~95% RH (Non-condensing)	-10°C ~ +55°C (-14°F ~ +131°F)	-10°C ~ +40°C (+14°F ~ +104°F)	-10°C ~ +55°C (+14°F ~ +131°F)
Certification	IP66, IK10, NEMA4X	IP66/IP67, IK10, NEMA4X	-	-	IP42
Power Consumption	Max. 23W, Typ. 14W	Max. 23W, Typ. 14W	PoE: Max 6.4W, typical 4.6W 12VDC: Max 5.8W, typical 4.1W	PoE: Max 7.7W, typical 6.4W	PoE: Max 6.4W, typical 4.6W
Dimensions (WxHxD) / Weight	Ø204.3 x 265mm (Ø8.04" x 10.43") 2.7kg (5.95lb)	Ø227 x 299.2mm (Ø8.94" x 11.78") 5.4kg (11.93lb)	W 73.8 x H 66.6 x D 136.2mm (2.91" x 2.62" x 5.36") 320g (0.71lb)	Ø99 x 49mm (Ø3.9" x 1.93") 370g (0.82lb)	Ø99 x 49mm (Ø3.9" x 1.93") 320g (0.705lb)
Additional Features	Auto tracking (Based on MD)	Auto tracking (Based on MD)	Hallway View	Panorama view, Business Intelligence	Panorama view, Business Intelligence



TNV-7011RC
3MP Corner Mount Camera



TNV-8011C
5MP Corner Mount Camera

Imaging Device	1/2.8" CMOS	1/2.8" CMOS
Resolution / Max. Frame Rate	3MP / 30fps	5MP / 30fps
Min. Illumination	Color: 0.3 lux (F2.0, 1/30sec) B/W: 0 lux (F2.0, 1/30sec)	Color: 0.1 lux (F2.3, 1/30sec) B/W: 0.02 lux (F2.3, 1/30sec)
Video Output	CVBS: 1.0 Vp-p	CVBS: 1.0 Vp-p, Micro USB Type B
Focal Length	2.8mm fixed focal	2.3mm fixed focal
Angular Field of View	H: 102° / V: 75° / D: 129°	H: 131° / V: 93.4° / D: 174°
Pan / Tilt / Rotate	- / 30° ~ 60° / -	-
IR Viewable Length	10m (32.8ft)	-
Day & Night	Auto (ICR)	Auto (ICR)
Wide Dynamic Range	120dB	120dB
Digital Noise Reduction	SSNR V	SSNR
Digital Image Stabilization	Support	Support
Analytics	Tampering, Loitering, Directional detection, Defocus detection, Fog detection, Virtual line, Enter/Exit, Appear/Disappear, Audio detection, Face detection, Motion detection, Digital auto tracking, Sound classification, Shock detection	Defocus detection, Directional detection, Motion detection, Enter/Exit, Tampering, Virtual line, Audio detection
Business Intelligence	-	-
Alarm I/O	1 / 1	1 / 1
Audio I/O	Selectable (mic in/line in) / Line out	Selectable (mic in/line in) / Line out
Video Compression	H.265 / H.264, MJPEG	H.265 / H.264, MJPEG
WiseStream	WiseStream II	WiseStream II
Streaming	Up to 10 profiles	Up to 3 profiles
Edge Storage	micro SD/SDHC/SDXC 1 slot 256GB	micro SD/SDHC/SDXC 1 slot 128GB
Application Programming Interface	SUNAPI (HTTP API) Wisenet open platform	SUNAPI (HTTP API) Wisenet open platform
Operating Temperature	-10°C ~ +55°C (+14°F ~ +131°F) / 0~90% RH	-10°C ~ +55°C (+14°F ~ +131°F) / 0~95% RH
Certification	IP66, IP6K9K, IK10+	IP66, IP6K9K, IK10
Power Consumption	PoE: Max 12W, typical 10.1W, 12VDC: Max. 11W, typical 8.6W	PoE: Max 6.49W, typical 4.6W
Dimensions (WxHxD) / Weight	Ø295.5 x 113.5mm (Ø11.6" x 4.47") 2.1kg (4.63lb)	W 170 x H 165 x D 78.8mm (6.69" x 6.49" x 3.1") 830g (1.83lb)
Additional Features	-	-



TNO-6322ER
2MP Explosion-proof IR Camera



TNU-6322E
2MP Explosion-proof Camera



TNU-6322ER
2MP Explosion-proof IR Camera

Imaging Device	1/2.8" CMOS	1/2.8" CMOS	1/2.8" CMOS
Resolution / Max. Frame Rate	2MP / 60fps	2MP / 60fps	2MP / 60fps
Min. Illumination	Color: 0.05Lux (1/30sec, F1.6) B/W: 0Lux (IR LED on)	Color: 0.05Lux (1/30sec, F1.6) B/W: 0.005Lux (1/30sec, F1.6)	Color: 0.05Lux (1/30sec, F1.6) B/W: 0Lux (IR LED on)
Video Output	-	-	-
Focal Length	4.44 ~ 142.6mm (32X) zoom	4.44 ~ 142.6mm (32X) zoom	4.44 ~ 142.6mm (32X) zoom
Angular Field of View	H: 61.8° (Wide) ~ 2.19° (Tele) V: 36.2° (Wide) ~ 1.24° (Tele)	H: 61.8° (Wide) ~ 2.19° (Tele) V: 36.2° (Wide) ~ 1.24° (Tele)	H: 61.8° (Wide) ~ 2.19° (Tele) V: 36.2° (Wide) ~ 1.24° (Tele)
Pan / Tilt / Rotate	-	360° Endless / 180° (-90° ~ 90°) / -	360° Endless / 180° (-90° ~ 90°) / -
IR Viewable Length	70m	-	200m
Day & Night	Auto (ICR)	Auto (ICR)	Auto (ICR)
Wide Dynamic Range	120dB	120dB	120dB
Digital Noise Reduction	SSNR V	SSNR V	SSNR V
Digital Image Stabilization	Support	Support	Support
Analytics	Defocus detection, Directional detection, Fog detection, Face detection, Motion detection, Appear/Disappear, Enter/Exit, Loitering, Tampering, Virtual line, Audio detection	Defocus detection, Directional detection, Fog detection, Face detection, Motion detection, Appear/Disappear, Enter/Exit, Loitering, Tampering, Virtual line, Audio detection	Defocus detection, Directional detection, Fog detection, Face detection, Motion detection, Appear/Disappear, Enter/Exit, Loitering, Tampering, Virtual line, Audio detection
Business Intelligence	-	-	-
Alarm I/O	1 / 1	1 / 1	1 / 1
Audio I/O	Selectable (mic in/line in) / Line out	Selectable (mic in/line in) / Line out	Selectable (mic in/line in) / Line out
Video Compression	H.265 / H.264, MJPEG	H.265 / H.264, MJPEG	H.265 / H.264, MJPEG
WiseStream	WiseStream II	WiseStream II	WiseStream II
Streaming	Up to 10 Profiles	Up to 10 Profiles	Up to 10 Profiles
Edge Storage	-	-	-
Application Programming Interface	ONVIF profile S/G/T, SUNAPI, Wisenet open platform	ONVIF Profile S/G/T, SUNAPI (HTTP API), Wisenet open platform	ONVIF Profile S/G/T, SUNAPI (HTTP API), Wisenet open platform
Operating Temperature	IR Off: -40° C ~ +60° C (-40° F ~ +140° F) / 0 ~ 95% RH IR On: -40° C ~ +55° C (-40° F ~ +131° F) / 0 ~ 95% RH	-40° C ~ +60° C (-40° F ~ +140° F) / 0 ~ 95% RH	-40° C ~ +60° C (-40° F ~ +140° F) / 0 ~ 95% RH
Certification	IP67, IK10, ATEX, IECEx, KCs	IP67, IK10, ATEX, IECEx, KCs	IP67, IK10, ATEX, IECEx, KCs
Power Consumption	24VAC: Max. 45W	24VAC: Max. 99W	24VAC: Max. 99W (Camera) 24VAC: Max. 50W (IR)
Dimensions (WxHxD) / Weight	175(W)x242.5(H)x320(D)mm(6.89x9.59x12.59") / 11.5kg(25.35lb)	W 355 x H 427 x D 235mm (13.97" x 16.81" x 9.25") 25kg (55.12lb)	W 611 x H 438 x D 235mm (24.06" x 17.24" x 9.25") 36kg (79.37lb)
Additional Features	Stainless(SUS316L) housing, Built in wiper	-	-



TNU-6321
2MP Positioning PTZ Camera



TNU-4041T / 4051T
VGA Thermal Positioning Camera

Imaging Device	VGA Uncooled micro bolometer (12 μ m)	Uncooled Micro bolometer
Resolution / Max. Frame Rate	2MP / 60fps	640 x 480 / 30fps
Min. Illumination	Color: 0.05Lux (F1.6, 1/30sec) B/W: 0.005 Lux (F1.6, 1/30sec)	-
Video Output	CVBS: 1.0 Vp-p	CVBS: 1.0 Vp-p
Focal Length	4.44~142.6mm (32x) zoom	19mm / 35mm fixed
Angular Field of View	H: 61.8° (Wide) ~ 2.19° (Tele) V: 36.2° (Wide) ~ 1.24° (Tele)	H: 32° / V: 24.3° / D: 39.2° H: 17.2° / V: 13° / D: 22°
Pan / Tilt / Rotate	360° Endless / (130°) -90° ~ 40° / -	360° Endless / -90° ~ 40° / -
IR Viewable Length	200m with SPI-50 (Optional)	-
Day & Night	Auto (ICR)	-
Wide Dynamic Range	120dB	-
Digital Noise Reduction	SSNR V	-
Digital Image Stabilization	Support	Support (Built-in Gyro sensor)
Analytics	Defocus detection, Directional detection, Fog detection, Face detection, Motion detection, Appear/Disappear, Enter/Exit, Loitering, Tampering, Virtual line, Audio detection	Directional detection, Motion detection, Appear/Disappear, Enter/Exit, Loitering, Tampering, Virtual line, Audio detection, Temperature detection, Sound classification, Shock detection
Business Intelligence	-	-
Alarm I/O	1 / 1	1/2
Audio I/O	Selectable (mic in/line in) / Line out	Selectable (mic in/line in) / Line out
Video Compression	H.265 / H.264, MJPEG	H.265 / H.264, MJPEG
WiseStream	WiseStream II	WiseStream II
Streaming	Up to 10 profiles	Up to 10 Profiles
Edge Storage	micro SD/SDHC/SDXC	Micro SD/SDHC/SDXC 1slot 256GB
Application Programming Interface	ONVIF Profile S/G/T SUNAPI (HTTP API) Wisenet open platform	ONVIF Profile S/G/T SUNAPI (HTTP API) Wisenet open platform
Operating Temperature	-40°C ~ +55°C (-40°F ~ +131°F) / 0~90% RH	-40° C ~ +55° C (-40° F ~ +131° F) / 0~90% RH
Certification	IP66, Safety (UL, KC-SDOC), EMC (FCC, CE, VCCI, RCM, KC)	IP66, NEMA 4X, IK10
Power Consumption	Max 100W (Heater On), typical 25W (Heater Off)	24VAC: Max 84W(Heater on), Max 62W(Heater off)
Dimensions (WxHxD) / Weight	W 219 × H 528.2 × D 460mm (8.62" x 20.79" x 18.11") 14kg (30.86lb)	W 219 x H 528 x D 335mm (8.62" x 20.79" x 13.19") 11.7kg (25.79lb)
Additional Features		Various color palettes



TNO-4051T
VGA Thermal Bullet Camera



TNO-4050T
VGA Thermal Bullet Camera

Imaging Device	Uncooled Micro bolometer	Uncooled Micro bolometer
Resolution / Max. Frame Rate	640 x 480 / 30fps	640 x 480 / 30fps
Min. Illumination	-	-
Video Output	CVBS: 1.0 Vp-p	CVBS: 1.0 Vp-p, Micro USB Type B
Focal Length	35mm fixed	35mm fixed
Angular Field of View	H: 17.2° / V: 13° / D: 22°	H: 17.2° / V: 13° / D: 22°
Pan / Tilt / Rotate	-	-
IR Viewable Length	-	-
Day & Night	-	-
Wide Dynamic Range	-	-
Digital Noise Reduction	-	-
Digital Image Stabilization	Support (Built-in Gyro sensor)	Support (Built-in Gyro sensor)
Analytics	Intelligent analytics Audio detection Sound classification Shock detection Temperature change detection	Intelligent analytics Audio detection Sound classification Shock detection Temperature change detection
Business Intelligence	-	-
Alarm I/O	1 / 2	1 / 2
Audio I/O	Selectable (mic in/line in) / Line out	Selectable (mic in/line in) / Line out
Video Compression	H.265 / H.264, MJPEG	H.265 / H.264, MJPEG
WiseStream	WiseStream II	WiseStream II
Streaming	Up to 10 Profiles	Up to 10 Profiles
Edge Storage	micro SD/SDHC/SDXC	micro SD/SDHC/SDXC
Application Programming Interface	ONVIF profile S/G, SUNAPI, Wisenet open platform	ONVIF profile S/G, SUNAPI, Wisenet open platform
Operating Temperature	-40°C ~ +60°C (-40°F ~ +140°F)	-40°C ~ +60°C (-40°F ~ +140°F)
Certification	IP66, NEMA 4X	IP66, NEMA 4X
Power Consumption	PoE: Max 10W 12VDC: Max 9W 24VAC: Max 10.5W	PoE: Max 10W 12VDC: Max 9W 24VAC: Max 10.5W
Dimensions (WxHxD) / Weight	Ø101.97 x 309mm (Ø4.01" x 12.17") 2.5kg (5.51 lb)	Ø147.51 x 401.8mm (Ø5.81" x 15.82") 3.17kg (7.0 lb)
Additional Features	Various color palettes PT type	Various color palettes



TNO-4041T
VGA Thermal Bullet Camera



TNO-4041TR
VGA Radiometric Thermal Bullet Camera



TNO-4040T
VGA Thermal Bullet Camera



TNO-4040TR
VGA Radiometric Thermal Bullet Camera

Imaging Device	Uncooled Micro bolometer	Uncooled Micro bolometer	Uncooled Micro bolometer	Uncooled Micro bolometer
Resolution / Max. Frame Rate	640 x 480 / 30fps	640 x 480 / 30fps	640 x 480 / 30fps	640 x 480 / 30fps
Min. Illumination	-	-	-	-
Video Output	CVBS: 1.0 Vp-p	CVBS: 1.0 Vp-p	CVBS: 1.0 Vp-p, Micro USB Type B	CVBS: 1.0 Vp-p, Micro USB Type B
Focal Length	19mm fixed	19mm fixed	19mm fixed	19mm fixed
Angular Field of View	H: 32° / V: 24.3° / D: 39.2°	H: 32° / V: 24.3° / D: 39.2°	H: 32° / V: 24.3° / D: 39.2°	H: 32° / V: 24.3° / D: 39.2°
Pan / Tilt / Rotate	-	-	-	-
IR Viewable Length	-	-	-	-
Day & Night	-	-	-	-
Wide Dynamic Range	-	-	-	-
Digital Noise Reduction	-	-	-	-
Digital Image Stabilization	Support (Built-in Gyro sensor)	Support (Built-in Gyro sensor)	Support (Built-in Gyro sensor)	Support (Built-in Gyro sensor)
Analytics	Intelligent analytics Audio detection Sound classification Shock detection Temperature change detection	Intelligent analytics Audio detection Sound classification Shock detection Temperature detection	Intelligent analytics Audio detection Sound classification Shock detection Temperature detection	Intelligent analytics Audio detection Sound classification Shock detection Temperature detection
Business Intelligence	-	-	-	-
Alarm I/O	1 / 2	1 / 2	1 / 2	1 / 2
Audio I/O	Selectable (mic in/line in) / Line out	Selectable (mic in/line in) / Line out	Selectable (mic in/line in) / Line out	Selectable (mic in/line in) / Line out
Video Compression	H.265 / H.264, MJPEG	H.265 / H.264, MJPEG	H.265 / H.264, MJPEG	H.265 / H.264, MJPEG
WiseStream	WiseStream II	WiseStream II	WiseStream II	WiseStream II
Streaming	Up to 10 Profiles	Up to 10 Profiles	Up to 10 Profiles	Up to 10 Profiles
Edge Storage	micro SD/SDHC/SDXC	micro SD/SDHC/SDXC	micro SD/SDHC/SDXC	micro SD/SDHC/SDXC
Application Programming Interface	ONVIF profile S/G, SUNAPI, Wisenet open platform	ONVIF profile S/G/T, SUNAPI, Wisenet open platform	ONVIF profile S/G, SUNAPI, Wisenet open platform	ONVIF profile S/G/T, SUNAPI, Wisenet open platform
Operating Temperature	-40°C ~ +60°C (-40°F ~ +140°F)	-40°C ~ +60°C (-40°F ~ +140°F)	-40°C ~ +60°C (-40°F ~ +140°F)	-40°C ~ +60°C (-40°F ~ +140°F)
Certification	IP66, NEMA 4X, IK 10	IP66, NEMA 4X, IK 10	IP66, NEMA 4X, IK 10	IP66, NEMA 4X, IK 10
Power Consumption	PoE: Max 10W 12VDC: Max 9W 24VAC: Max 10.5W	PoE: Max 10W 12VDC: Max 9W 24VAC: Max 10.5W	PoE: Max 10W 12VDC: Max 9W 24VAC: Max 10.5W	PoE: Max 10W 12VDC: Max 9W 24VAC: Max 10.5W
Dimensions (WxHxD) / Weight	Ø101.97 x 309mm (Ø4.01" x 12.17") 2.5kg (5.51lb)	Ø101.97 x 309mm (Ø4" x 12.17") 2.45kg (5.41lb)	Ø147.51 x 401.8mm (Ø5.81" x 15.82") 3.17kg (7.0lb)	Ø101.97 x 401.8mm (Ø4.01" x 15.82") 3.12kg (6.89lb)
Additional Features	Various color palettes PT type	Various color palettes Spot temperature reading PT type	Various color palettes	Various color palettes Spot temperature reading



TNO-4030T
VGA Thermal Bullet Camera



TNO-3020T
QVGA Thermal Bullet Camera



TNO-3030T
QVGA Thermal Bullet Camera



TNO-3040T
QVGA Thermal Bullet Camera

Imaging Device	Uncooled Micro bolometer	Uncooled Micro bolometer	Uncooled Micro bolometer	Uncooled Micro bolometer
Resolution / Max. Frame Rate	640 x 480 / 30fps	320 x 240 / 30fps	320 x 240 / 30fps	320 x 240 / 30fps
Min. Illumination	-	-	-	-
Video Output	CVBS: 1.0 Vp-p, Micro USB Type B			
Focal Length	13mm fixed	4.7mm fixed focal	13.7mm fixed focal	19mm fixed focal
Angular Field of View	H: 48.6° / V: 36.4° / D: 61.6°	H: 50° / V: 36.4° / D: 65.3°	H: 16° / V: 12° / D: 20°	H: 11.5° / V: 8.7° / D: 14.4°
Pan / Tilt / Rotate	-	-	-	-
IR Viewable Length	-	-	-	-
Day & Night	-	-	-	-
Wide Dynamic Range	-	-	-	-
Digital Noise Reduction	-	-	-	-
Digital Image Stabilization	Support (Built-in Gyro sensor)			
Analytics	Intelligent analytics Audio detection Sound classification Shock detection Temperature detection			
Business Intelligence	-	-	-	-
Alarm I/O	1 / 2	1 / 2	1 / 2	1 / 2
Audio I/O	Selectable (mic in/line in) / Line out			
Video Compression	H.265 / H.264, MJPEG			
WiseStream	WiseStream II	WiseStream II	WiseStream II	WiseStream II
Streaming	Up to 10 Profiles			
Edge Storage	micro SD/SDHC/SDXC	micro SD/SDHC/SDXC	micro SD/SDHC/SDXC	micro SD/SDHC/SDXC
Application Programming Interface	ONVIF profile S/G, SUNAPI, Wisenet open platform	ONVIF profile S/G/T, SUNAPI, Wisenet open platform	ONVIF profile S/G/T, SUNAPI, Wisenet open platform	ONVIF profile S/G/T, SUNAPI, Wisenet open platform
Operating Temperature	-40°C ~ +60°C (-40°F ~ +140°F)			
Certification	IP66, NEMA 4X, IK10			
Power Consumption	PoE: Max 10W 12VDC: Max 9W 24VAC: Max 10.5W	PoE: Max. 8.7W, typical 7.5W 12VDC: Max. 7.8W, typical 6.7W 24VAC: Max. 9.2W, typical 8W	PoE: Max. 8.7W, typical 7.5W 12VDC: Max. 7.8W, typical 6.7W 24VAC: Max. 9.2W, typical 8W	PoE: Max. 8.7W, typical 7.5W 12VDC: Max. 7.8W, typical 6.7W 24VAC: Max. 9.2W, typical 8W
Dimensions (WxHxD) / Weight	Ø147.51 x 401.8mm (Ø5.81" x 15.82") 3.17kg (7.0lb)	Ø147.51 x 375.3mm (Ø5.81" x 14.78") 2.51kg (5.538lb)	Ø147.51 x 375.3mm (Ø5.81" x 14.78") 2.51kg (5.538lb)	Ø147.51 x 375.3mm (Ø5.81" x 14.78") 2.51kg (5.538lb)
Additional Features	Various color palettes	Various color palettes	Various color palettes	Various color palettes



TNO-3050T
QVGA Thermal Bullet Camera



TNO-L3030T
QVGA Thermal Bullet Camera



TNO-L4030T
VGA Thermal Bullet Camera



TID-600R
2MP Network Intercom Station

Imaging Device	Uncooled Micro bolometer	Uncooled Micro bolometer	Uncooled Micro bolometer	1/2.8" CMOS
Resolution / Max. Frame Rate	320 x 240 / 30fps	320 x 240 / 8fps	640 x 480 / 8fps	2MP / 60fps
Min. Illumination	-	-	-	Color: 0.018Lux (F1.6, 1/30sec) BW: 0 Lux (IR LED On)
Video Output	CVBS: 1.0 Vp-p, Micro USB Type B	CVBS: 1.0 Vp-p, Micro USB Type B	CVBS: 1.0 Vp-p, Micro USB Type B	CVBS: 1.0 Vp-p
Focal Length	35mm fixed focal	13.7mm fixed focal	13mm fixed focal	1.6mm fixed focal
Angular Field of View	H: 6.3° / V: 4.7° / D: 7.8°	H: 16°, V: 12°, D: 20°	H: 48.6°, V: 36.4°, D: 61.6°	H: 180° / V: 114° / D: 180°
Pan / Tilt / Rotate	-	-	-	-
IR Viewable Length	-	-	-	5m
Day & Night	-	-	-	Auto (ICR)
Wide Dynamic Range	-	-	-	WDR (150dB)
Digital Noise Reduction	-	-	-	SSNR V
Digital Image Stabilization	Support (Built-in Gyro sensor)	Support (Built-in Gyro sensor)	Support (Built-in Gyro sensor)	Support
Analytics	Intelligent analytics Audio detection Sound classification Shock detection Temperature detection	Directional detection, motion detection, appear/disappear, enter/exit, loitering, tampering, virtual line, audio detection, temperature detection, sound classification, shock detection	Directional detection, motion detection, appear/disappear, enter/exit, loitering, tampering, virtual line, audio detection, temperature detection, sound classification, shock detection	Directional detection, Motion detection, Appear/Disappear, Enter/Exit, Loitering, Tampering, Virtual line, Audio detection, Shock detection, Sound classification
Business Intelligence	-	-	-	-
Alarm I/O	1 / 2	1 / 2	1 / 2	Input 2ea / Output 1ea, Relay out 1ea (12VDC Max. 550mA with 2A adapter) Tampering switch, Touchless call
Audio I/O	Selectable (mic in/line in) / Line out	Selectable (mic in/line in) / Line out	Selectable (mic in/line in) / Line out	Built-in mic / Built-in speaker
Video Compression	H.265 / H.264, MJPEG	H.265, H.264, MJPEG	H.265, H.264, MJPEG	H.265 / H.264, MJPEG
WiseStream	WiseStream II	WiseStream II	WiseStream II	WiseStream II
Streaming	Up to 10 Profiles	Up to 10 Profiles	Up to 10 Profiles	Up to 10 Profiles
Edge Storage	micro SD/SDHC/SDXC	Micro SD/SDHC/SDXC	Micro SD/SDHC/SDXC	micro SD/SDHC/SDXC 1slot 256GB
Application Programming Interface	ONVIF profile S/G/T, SUNAPI, Wisenet open platform	ONVIF profile S/G/T, SUNAPI, Wisenet open platform	ONVIF profile S/G/T, SUNAPI, Wisenet open platform	ONVIF Profile S SUNAPI (HTTP API) Wisenet open platform
Operating Temperature	-40°C ~ +60°C (-40°F ~ +140°F)	-40°C ~ +60°C (-40°F ~ +140°F)	-40°C ~ +60°C (-40°F ~ +140°F)	-30°C ~ +55°C (-22°F ~ +131°F) 0~95% RH
Certification	IP66, NEMA 4X	IP66, NEMA 4X, IK10	IP66, NEMA 4X, IK10	IP65, IK08, NEMA4X, Safety (UL), EMC (FCC, CE)
Power Consumption	PoE: Max. 8.7W, typical 7.5W 12VDC: Max. 7.8W, typical 6.7W 24VAC: Max. 9.2W, typical 8W	PoE: Max. 8.7W, typical 7.5W 12VDC: Max. 7.8W, typical 6.7W 24VAC: Max. 9.2W, typical 8.0W	PoE: Max. 10W, typical 8.6W 12VDC: Max. 9W, typical 7.5W 24VAC: Max. 10.5W, typical 8.9W	PoE: Max 12.95W, typical 9.1W 12VDC: Max 17.6W, typical 7W * 12VDC power consumption includes 12VDC/550mA relay out
Dimensions (WxHxD) / Weight	Ø147.51 x 401.3mm (Ø5.81" x 15.79") 2.74kg (6.05lb)	Ø147.51 x 375.3mm (58.07" x 147.76") 2,512g (5.538lb)	Ø101.97 x 401.8mm (4.01" x 15.82") 3,124g (6.89lb)	W 49 x H 165 x D 48mm (1.93" x 6.5" x 1.89") 490g (1.08lb)
Additional Features	Various color palettes	Various color palettes	Various color palettes	SIP, Directional detection, Motion detection, Appear/Disappear, Enter/Exit, Loitering, Tampering, Virtual line, Audio detection, Shock detection, Sound classification



TNO-3010T
QVGA Thermal Bullet Camera



TNO-4030TR
VGA Radiometric Thermal Bullet Camera



TNO-L4030TR
VGA Radiometric Thermal Bullet Camera

Imaging Device	Uncooled micro bolometer	Uncooled micro bolometer	Uncooled micro bolometer
Resolution/ Max. FrameRate	640x480 / 30fps	640x480 / 30fps (8fps – TNO-L4030TR)	640x480 / 30fps (8fps – TNO-L4030TR)
NETD	< 60mK	< 60mK	< 60mK
Pixel Size	12µm	12µm	12µm
Video Out	CVBS 1.0 Vp-p, Micro USB Type B, 1280x720 for installation	CVBS 1.0 Vp-p, Micro USB Type B, 1280x720 for installation	CVBS 1.0 Vp-p, Micro USB Type B, 1280x720 for installation
Focal Length (Zoom Ratio)	2.7mm fixed focal	2.7mm fixed focal	2.7mm fixed focal
Angular Field of View	H:92.0 ° / V:65.5 ° / D:125.7 °	H:92.0 ° / V:65.5 ° / D:125.7 °	H:92.0 ° / V:65.5 ° / D:125.7 °
Min. Object Distance	0.3m(0.98ft)	0.3m(0.98ft)	0.3m(0.98ft)
Digital Image Stabilization	Support(built-in gyro sensor)	Support(built-in gyro sensor)	Support(built-in gyro sensor)
Analytics	Directional detection, Motion detection, Appear/Disappear, Enter/Exit, Loitering, Tampering, Virtual line, Audio detection, Abnormal Temperature change detection, Sound	Directional detection, Motion detection, Appear/Disappear, Enter/Exit, Loitering, Tampering, Virtual line, Audio detection, Abnormal Temperature change detection, Sound	Directional detection, Motion detection, Appear/Disappear, Enter/Exit, Loitering, Tampering, Virtual line, Audio detection, Abnormal Temperature change detection, Sound
Temperature Detect Range	–	–	–
Temperature Accuracy	–	–	–
Temperature Detection	3 Rectangular ROI zones	3 Rectangular ROI zones	3 Rectangular ROI zones
Alarm I/O	1 / 2	1 / 2	1 / 2
Audio I/O	Selectable (mic in/line in) / Line out	Selectable (mic in/line in) / Line out	Selectable (mic in/line in) / Line out
Video Compression	H.265/H.264: Main/Baseline/High, MJPEG	H.265/H.264: Main/Baseline/High, MJPEG	H.265/H.264: Main/Baseline/High, MJPEG
WiseStream	WiseStream II	WiseStream II	WiseStream II
Streaming	Up to 10Profiles	Up to	Up to
Edge Storage	Micro SD/SDHC/SDXC 1slot 256GB	micro SD/SDHC/SDXC	micro SD/SDHC/SDXC
Application Programming Interface	ONVIF Profile S/G/T SUNAPI(HTTP API) Wisenet open platform"	ONVIF Profile S/G/T SUNAPI(HTTP API) Wisenet open platform	ONVIF Profile S/G/T SUNAPI(HTTP API) Wisenet open platform
Power Consumption	–	PoE: Max. 10W, typical 8.6W 12VDC: Max. 9W, typical 7.5W 24VAC: Max. 10.5W, typical 8.9W	PoE: Max. 10W, typical 8.6W 12VDC: Max. 9W, typical 7.5W 24VAC: Max. 10.5W, typical 8.9W
Product dimensions / weight	Φ 147.51x375.3mm(58.07x147.76") / 2512g(5.538lb)	Φ 147.51x375.3mm(58.07x147.76") / 2512g(5.538lb)	Φ 147.51x375.3mm(58.07x147.76") / 2512g(5.538lb)
Additional Features	Various Color Palettes, Hybrid palettes, Spot temperature reading, Handover	Various Color Palettes, Hybrid palettes, Spot temperature reading, Handover	Various Color Palettes, Hybrid palettes, Spot temperature reading, Handover
Power Consumption	PoE: Max 10W 12VDC: Max 9W 24VAC: Max 10.5W	PoE: Max. 8.7W, typical 7.5W 12VDC: Max. 7.8W, typical 6.7W 24VAC: Max. 9.2W, typical 8W	PoE: Max. 8.7W, typical 7.5W 12VDC: Max. 7.8W, typical 6.7W 24VAC: Max. 9.2W, typical 8W
Dimensions (WxHxD) /Weight	Ø 101.97 x 401.8mm (Ø4.01" x 15.82") 3.12kg (6.89lb)	Ø 147.51 x 375.3mm (Ø5.81" x 14.78") 2.51kg (5.538lb)	Ø 147.51 x 375.3mm (Ø5.81" x 14.78") 2.51kg (5.538lb)
Additional Features	Various color palettes Spot temperature reading	Various color palettes	Various color palettes



LNO-6012R
2MP IR Bullet Camera



LNO-6022R
2MP IR Bullet Camera



LNO-6072R
2MP IR Bullet Camera



LND-6012R
2MP IR Dome Camera



LND-6022R
2MP IR Dome Camera

Imaging Device	1/2.8" CMOS	1/2.8" CMOS	1/2.8" CMOS	1/2.8" CMOS	1/2.8" CMOS
Resolution / Max. Frame Rate	2MP / 30fps	2MP / 30fps	2MP / 30fps	2MP / 30fps	2MP / 30fps
Min. Illumination	Color: 0.03Lux (F2.0, 1/30sec) BW: 0Lux (IR LED on)	Color: 0.03Lux (F2.0, 1/30sec) BW: 0Lux (IR LED on)	Color: 0.03Lux (F1.6, 1/30sec) BW: 0Lux (IR LED on)	Color: 0.03Lux (F2.0, 1/30sec) BW: 0Lux (IR LED on)	Color: 0.03Lux (F1.6, 1/30sec) BW: 0Lux (IR LED on)
Video Output	-	-	-	-	-
Focal Length	2.8mm fixed focal	4.0mm fixed focal	3.2~10mm (3.1x) manual varifocal	2.8mm fixed focal	4.0mm fixed focal
Angular Field of View	H: 113.7° / V: 61.5° / D: 134.4°	H: 84.3° / V: 45.6° / D: 98.3°	H: 109° (Wide) ~ 33.2° (Tele) V: 57.4° (Wide) ~ 18.7° (Tele) D: 132° (Wide) ~ 38° (Tele)	H: 113.7° / V: 61.5° / D: 134.4°	H: 84.3° / V: 45.6° / D: 98.3°
Pan / Tilt / Rotate	-	-	-	0° ~ 350° / 0° ~ 67° / 0° ~ 355°	0° ~ 350° / 0° ~ 67° / 0° ~ 355°
IR Viewable Length	30m (98.43ft)	30m (98.43ft)	30m (98.43ft)	20m (65.62ft)	20m (65.62ft)
Day & Night	Auto (ICR)	Auto (ICR)	Auto (ICR)	Auto (ICR)	Auto (ICR)
Wide Dynamic Range	120dB	120dB	120dB	120dB	120dB
Digital Noise Reduction	SSNR	SSNR	SSNR	SSNR	SSNR
Digital Image Stabilization	-	-	-	-	-
Analytics	Motion detection, Tampering	Motion detection, Tampering	Motion detection, Tampering	Motion detection, Tampering	Motion detection, Tampering
Business Intelligence	-	-	-	-	-
Alarm I/O	-	-	-	-	-
Audio I/O	-	-	-	-	-
Video Compression	H.264, MJPEG	H.264, MJPEG	H.264, MJPEG	H.264, MJPEG	H.264, MJPEG
WiseStream	WiseStream II	WiseStream II	WiseStream II	WiseStream II	WiseStream II
Streaming	Up to 3 profiles	Up to 3 profiles	Up to 3 profiles	Up to 3 profiles	Up to 3 profiles
Edge Storage	micro SD/SDHC 1slot 32GB	micro SD/SDHC 1slot 32GB	micro SD/SDHC 1slot 32GB	micro SD/SDHC 1slot 32GB	micro SD/SDHC 1slot 32GB
Application Programming Interface	ONVIF Profile S/G/T SUNAPI (HTTP API)	ONVIF Profile S/G/T SUNAPI (HTTP API)	ONVIF Profile S/G/T SUNAPI (HTTP API)	ONVIF Profile S/G/T SUNAPI (HTTP API)	ONVIF Profile S/G/T SUNAPI (HTTP API)
Operating Temperature	-30°C ~ +55°C (-22°F ~ +131°F) / 0~90% RH * Start up should be done at above -20°C (-4°F)	-30°C ~ +55°C (-22°F ~ +131°F) / 0~90% RH * Start up should be done at above -20°C (-4°F)	-30°C ~ +55°C (-22°F ~ +131°F) / 0~90% RH * Start up should be done at above -20°C (-4°F)	-10°C ~ +55°C (+14°F ~ +131°F) / 0~90% RH	-10°C ~ +55°C (+14°F ~ +131°F) / 0~90% RH
Certification	IP66	IP66	IP66	-	-
Power Consumption	Max 6.4W, Typical 5W	Max 6.4W, Typical 5W	Max 6.4W, Typical 5W	Max 6.4W, Typical 5W	Max 6.4W, Typical 5W
Dimensions (WxHxD) / Weight	Ø78 x 262mm (Ø3.07" x 10.31") 390g (0.86lb)	Ø78 x 262mm (Ø3.07" x 10.31") 390g (0.86lb)	Ø78 x 262mm (Ø3.07" x 10.31") 420g (0.93lb)	Ø110 x 86mm (Ø4.33" x 3.39") 270g (0.59lb)	Ø110 x 86mm (Ø4.33" x 3.39") 270g (0.59lb)



LND-6072R
2MP IR Dome Camera



LNV-6012R
2MP IR Vandal Dome Camera



LNV-6022R
2MP IR Vandal Dome Camera



LNV-6072R
2MP IR Vandal Dome Camera

Imaging Device	1/2.8" CMOS	1/2.8" CMOS	1/2.8" CMOS	1/2.8" CMOS
Resolution / Max. Frame Rate	2MP / 30fps	2MP / 30fps	2MP / 30fps	2MP / 30fps
Min. Illumination	Color: 0.03Lux (F1.6, 1/30sec) BW: 0Lux (IR LED on)	Color: 0.03Lux (F2.0, 1/30sec) BW: 0Lux (IR LED on)	Color: 0.03Lux (F2.0, 1/30sec) BW: 0Lux (IR LED on)	Color: 0.03Lux (F1.6, 1/30sec) BW: 0Lux (IR LED on)
Video Output	-	-	-	-
Focal Length	3.2~10mm (3.1x) manual varifocal	2.8mm fixed focal	4.0mm fixed focal	3.2~10mm (3.1x) manual varifocal
Angular Field of View	H: 109° (Wide)~33.2° (Tele) V: 57.4° (Wide)~18.7° (Tele) D: 132° (Wide)~38° (Tele)	H: 113.7° / V: 61.5° / D: 134.4°	H: 84.3° / V: 45.6° / D: 98.3°	H: 109° (Wide)~33.2° (Tele) V: 57.4° (Wide)~18.7° (Tele) D: 132° (Wide)~38° (Tele)
Pan / Tilt / Rotate	0°~350° / 0°~67° / 0°~355°	0°~350° / 0°~67° / 0°~355°	0°~350° / 0°~67° / 0°~355°	0°~350° / 0°~67° / 0°~355°
IR Viewable Length	20m (65.62ft)	30m (98.43ft)	30m (98.43ft)	30m (98.43ft)
Day & Night	Auto (ICR)	Auto (ICR)	Auto (ICR)	Auto (ICR)
Wide Dynamic Range	120dB	120dB	120dB	120dB
Digital Noise Reduction	SSNR	SSNR	SSNR	SSNR
Digital Image Stabilization	-	-	-	-
Analytics	Motion detection, Tampering	Motion detection, Tampering	Motion detection, Tampering	Motion detection, Tampering
Business Intelligence	-	-	-	-
Alarm I/O	-	-	-	-
Audio I/O	-	-	-	-
Video Compression	H.264, MJPEG	H.264, MJPEG	H.264, MJPEG	H.264, MJPEG
WiseStream	WiseStream II	WiseStream II	WiseStream II	WiseStream II
Streaming	Up to 3 profiles	Up to 3 profiles	Up to 3 profiles	Up to 3 profiles
Edge Storage	micro SD/SDHC 1slot 32GB	micro SD/SDHC 1slot 32GB	micro SD/SDHC 1slot 32GB	micro SD/SDHC 1slot 32GB
Application Programming Interface	ONVIF Profile S/G/T SUNAPI (HTTP API)	ONVIF Profile S/G/T SUNAPI (HTTP API)	ONVIF Profile S/G/T SUNAPI (HTTP API)	ONVIF Profile S/G/T SUNAPI (HTTP API)
Operating Temperature	-10°C~+55°C (+14°F~+131°F) / 0~90% RH	-30°C~+55°C (-22°F~+131°F) / 0~90% RH * Start up should be done at above -20°C (-4°F)	-30°C~+55°C (-22°F~+131°F) / 0~90% RH * Start up should be done at above -20°C (-4°F)	-30°C~+55°C (-22°F~+131°F) / 0~90% RH * Start up should be done at above -20°C (-4°F)
Certification	-	IP66, IK10	IP66, IK10	IP66, IK10
Power Consumption	Max 6.4W, Typical 5W	Max 6.4W, Typical 5W	Max 6.4W, Typical 5W	Max 6.4W, Typical 5W
Dimensions (WxHxD) / Weight	Ø119.8x98.8mm (Ø4.72" x 3.89") 315g (0.69lb)	Ø120.3x91.7mm (Ø4.74" x 3.61") 410g (0.9lb)	Ø120.3x91.7mm (Ø4.74" x 3.61") 410g (0.9lb)	Ø137.8x106.1mm (Ø5.43" x 4.18") 525g (1.16lb)

High performance NVR

High resolution and great efficiency.
Quick and precise search enabled by
Hanwha Vision NVR

Hanwha Vision's NVR allows recording and streaming of videos in super high resolution and enhanced the efficiency of event and channel management with the new UI. It also offers AI based quick and precise object detection and classification on top of smart search.



Monitor all sub channels without registering them all

With the new Virtual Channel View, user can register only 1 main channel for recording and monitor sub channels without registering them to the NVR. In other words, no need to record every sub channel that needs to be simply streamed for live monitoring.

Registered channel
Recording and monitoring

CAMERA A
Channel #01

Using 1 channel on NVR
(can monitor up to 4CH)

Unregistered channel
Monitoring sub channels without recording

CAMERA A
Channel #02

CAMERA A
Channel #03

CAMERA A
Channel #04

Installation Wizard for easy auto recognition and setup

Local/web based installation wizard with a single UI provides easy and quick auto camera recognition and registration as well as configuration of each channel.



Local

Web



Design your own monitoring channels with the Dynamic layout

Dynamic layout allows users to freely customize the channel display. Set the best channel display and create the most intuitive monitoring environment.



Code your own event action with SUNAPI command and Integrate with the Software Key

Users can code their own event action using SUNAPI commands and integrate it with the Software Key. Then, a simple click on the Software Key appears on the channel display will run the event action. Customized codes run separately.

- 1 Code event action* and integrate with the Software key
* Simple focus, Day&Night (ICR), Alarm Out, etc.
- 2 Click the Software key to initiate the event action





PRN-6400DB4
64CH AI NVR



PRN-6400B4
64CH AI NVR



PRN-3200B4
32CH AI NVR



PRN-3200B2
32CH AI NVR



PRN-1600B2
16CH AI NVR

OS	Linux	Linux	Linux	Linux	Linux
Supported Compression	H.265 / H.264, MJPEG, WiseStream	H.265 / H.264, MJPEG, WiseStream	H.265 / H.264, MJPEG, WiseStream	H.265 / H.264, MJPEG	H.265 / H.264, MJPEG
Max. Recording Bit Rate	400Mbps	400Mbps	400Mbps	400Mbps	250Mbps
Max # of Cameras	64CH	64CH	32CH	32CH	16CH
Network Camera Resolution	32MP ~ CIF				
HDD Slot	16SATA (10TB per HDD), Hot-swap	16SATA (10TB per HDD), Hot-swap	16SATA (10TB per HDD), Hot-swap	8SATA (10TB per HDD), Hot-swap	8SATA (10TB per HDD), Hot-swap
Record Mode	Normal, Dual Stream, Schedule (Continuous/Event), Event (Pre/Post), Bookmark	Normal, Dual Stream, Schedule (Continuous/Event), Event (Pre/Post), Bookmark	Normal, Dual Stream, Schedule (Continuous/Event), Event (Pre/Post), Bookmark	Normal, Dual Stream, Schedule (Continuous/Event), Event (Pre/Post), Bookmark	Normal, Dual Stream, Schedule (Continuous/Event), Event (Pre/Post), Bookmark
Event Trigger	Alarm Input, Video Loss, Camera Event (Sensor, MD, Video Analytics, Defocus, Audio), Dynamic Event, User Event	Alarm Input, Video Loss, Camera Event (Sensor, MD, Video Analytics, Defocus, Audio), Dynamic Event, User Event	Alarm Input, Video Loss, Camera Event (Sensor, MD, Video Analytics, Defocus, Audio), Dynamic Event, User Event	Alarm Input, Video Loss, Camera Event (Sensor, MD, Video Analytics, Defocus, Audio), Dynamic Event, User Event	Alarm Input, Video Loss, Camera Event (Sensor, MD, Video Analytics, Defocus, Audio), Dynamic Event, User Event
Event Action	e-Mail, Event Push, PTZ Preset, Alarm Out, Buzzer, Monitor Out, FTP, SUNAPI Command, Shutdown	e-Mail, Event Push, PTZ Preset, Alarm Out, Buzzer, Monitor Out, FTP, SUNAPI Command, Shutdown	e-Mail, Event Push, PTZ Preset, Alarm Out, Buzzer, Monitor Out, FTP, SUNAPI Command, Shutdown	e-Mail, Event Push, PTZ Preset, Alarm Out, Buzzer, Monitor Out, FTP, SUNAPI Command, Shutdown	e-Mail, Event Push, PTZ Preset, Alarm Out, Buzzer, Monitor Out, FTP, SUNAPI Command, Shutdown
External Storage	iSCSI	iSCSI	iSCSI	iSCSI storage	iSCSI storage
RAID	RAID 5/6				
Hot Swap	Yes	Yes	Yes	Yes	Yes
Network Viewer Software	SSM, Webviewer, Smart Viewer, Wisenet mobile, Wisenet Viewer, Support CGI (SUNAPI) for integration to 3'rd party VMS	SSM, Webviewer, Smart Viewer, Wisenet mobile, Wisenet Viewer, Support CGI (SUNAPI) for integration to 3'rd party VMS	SSM, Webviewer, Smart Viewer, Wisenet mobile, Wisenet Viewer, Support CGI (SUNAPI) for integration to 3'rd party VMS	SSM, Webviewer, Smart Viewer, Wisenet mobile, Wisenet Viewer, Support CGI (SUNAPI) for integration to 3'rd party VMS	SSM, Webviewer, Smart Viewer, Wisenet mobile, Wisenet Viewer, Support CGI (SUNAPI) for integration to 3'rd party VMS
Local Monitor	Support dual monitor HDMI 1 (Up to 4K), HDMI 2 (FHD)	Support dual monitor HDMI 1 (Up to 4K), HDMI 2 (FHD)	Support dual monitor HDMI 1 (Up to 4K), HDMI 2 (FHD)	Support dual monitor HDMI 1 (Up to 4K), HDMI 2 (FHD)	Support dual monitor HDMI 1 (Up to 4K), HDMI 2 (FHD)
Network Camera Protocol	SUNAPI, ONVIF				
Power Input	100 ~ 240 VAC ± 10%, 50/60 Hz (Dual SMPS)	100 ~ 240 VAC ± 10%, 50/60 Hz	100 ~ 240 VAC ± 10% 50/60 Hz	100 ~ 240 VAC ± 10%: 50/60 Hz, 2.1A	100 ~ 240 VAC ± 10%: 50/60 Hz, 2.1A
Power Consumption	Max. 265W (16 HDD)	Max. 265W (16 HDD)	Max. 265W (16 HDD)	Max. 205W (With 10TB HDDs 8EA)	Max. 205W (With 10TB HDDs 8EA)
PoE Budget	-	-	-	-	-
Additional Features	<ul style="list-style-type: none"> LPR search (English, Numbers) AI search attribute (Person, Face, Vehicle, License plate – with AI cameras) N+1 failover supported PTZ camera configuration and control Dynamic layout Virtual channel view 	<ul style="list-style-type: none"> LPR search (English, Numbers) AI search attribute (Person, Face, Vehicle, License plate – with AI cameras) N+1 failover supported PTZ camera configuration and control Dynamic layout Virtual channel view 	<ul style="list-style-type: none"> LPR search (English, Numbers) AI search attribute (Person, Face, Vehicle, License plate – with AI cameras) N+1 failover supported PTZ camera configuration and control Dynamic layout Virtual channel view 	<ul style="list-style-type: none"> LPR search (English, Numbers) AI search attribute (Person, Face, Vehicle, License plate – with AI cameras) N+1 failover supported PTZ camera configuration and control Dynamic layout Virtual channel view 	<ul style="list-style-type: none"> LPR search (English, Numbers) AI search attribute (Person, Face, Vehicle, License plate – with AI cameras) N+1 failover supported PTZ camera configuration and control Dynamic layout Virtual channel view



NEW

XRN-6420DB4/6420B4
64CH NVR



XRN-6410DB4/6410B4
64CH NVR



XRN-6410RB2
64CH NVR



XRN-6410B2
64CH NVR

OS	Linux	Linux	Linux	Linux
Supported Compression	H.265, H.264, MJPEG	H.265 / H.264, MJPEG, WiseStream	H.265 / H.264, MJPEG, WiseStream	H.265 / H.264, MJPEG, WiseStream
Max. Recording Bit Rate	520Mbps	400Mbps	400Mbps	400Mbps
Max # of Cameras	64CH	64CH	64CH	64CH
Network Camera Resolution	32MP ~ CIF	32MP ~ CIF	32MP ~ CIF	32MP ~ CIF
HDD Slot	16SATA (10TB per HDD)	16SATA (10TB per HDD)	8SATA (10TB per HDD)	8SATA (10TB per HDD)
Record Mode	Normal, Dual Stream, Schedule (Continuous/Event), Event (Pre/Post), Bookmark	Normal, Dual Stream, Schedule (Continuous/Event), Event (Pre/Post), Bookmark	Normal, Dual Stream, Schedule (Continuous/Event), Event (Pre/Post), Bookmark	Normal, Dual Stream, Schedule (Continuous/Event), Event (Pre/Post), Bookmark
Event Trigger	Alarm Input, Video Loss, Camera Event (Sensor, MD, Video Analytics, Defocus, Audio), Dynamic Event, User Event	Alarm Input, Video Loss, Camera Event (Sensor, MD, Video Analytics, Defocus, Audio), Dynamic Event, User Event	Alarm Input, Video Loss, Camera Event (Sensor, MD, Video Analytics, Defocus, Audio), Dynamic Event, User Event	Alarm Input, Video Loss, Camera Event (Sensor, MD, Video Analytics, Defocus, Audio), Dynamic Event, User Event
Event Action	e-Mail, Event Push, PTZ Preset, Alarm Out, Buzzer, Monitor Out, FTP, SUNAPI Command, Shutdown	e-Mail, Event Push, PTZ Preset, Alarm Out, Buzzer, Monitor Out, FTP, SUNAPI Command, Shutdown	e-Mail, Event Push, PTZ Preset, Alarm Out, Buzzer, Monitor Out, FTP, SUNAPI Command, Shutdown	e-Mail, Event Push, PTZ Preset, Alarm Out, Buzzer, Monitor Out, FTP, SUNAPI Command, Shutdown
External Storage	iSCSI storage	iSCSI	iSCSI	iSCSI
RAID	RAID-5/6	RAID 5/6	RAID 5/6	-
Hot Swap	Yes	Yes	Yes	-
Network Viewer Software	SSM, WAVE, Webviewer, Wisenet Viewer, Wisenet mobile Support CGI(SUNAPI) for integration to 3'rd party VMS	SSM, Webviewer, Smart Viewer, Wisenet mobile, Wisenet Viewer, Support CGI(SUNAPI) for integration to 3'rd party VMS	SSM, Webviewer, Smart Viewer, Wisenet mobile, Wisenet Viewer, Support CGI(SUNAPI) for integration to 3'rd party VMS	SSM, Webviewer, Smart Viewer, Wisenet mobile, Wisenet Viewer, Support CGI(SUNAPI) for integration to 3'rd party VMS
Local Monitor	Dynamic layout, Virtual channel view [Web] Dynamic layout	Support dual monitor HDMI 1 (Up to 4K), HDMI 2 (FHD)	Support dual monitor HDMI 1 (Up to 4K), HDMI 2 (FHD)	Support dual monitor HDMI 1 (Up to 4K), HDMI 2 (FHD)
Network Camera Protocol	SUNAPI, ONVIF	SUNAPI, ONVIF	SUNAPI, ONVIF	SUNAPI, ONVIF
Power Input	-	100 ~ 240 VAC ± 10%; 50/60 Hz, 2.7A (Dual SMPS / XRN-6410B4)	100 ~ 240 VAC ± 10%; 50/60 Hz	100 ~ 240 VAC ± 10%; 50/60 Hz
Power Consumption	-	Max. 265W (16 HDD)	Max. 160w (8HDD)	Max. 138W (8 HDD)
PoE Budget	-	-	-	-
Additional Features	<ul style="list-style-type: none"> N+1 failover supported AI search (BestShot, Attribute) - When integrated with AI cameras PTZ camera configuration and control Dual SMPS (6410DB4) Dynamic layout Virtual channel view Fisheye dewarping 	<ul style="list-style-type: none"> N+1 failover supported AI search (BestShot, Attribute) - When integrated with AI cameras PTZ camera configuration and control Dual SMPS (6410DB4) Dynamic layout Virtual channel view Fisheye dewarping 	<ul style="list-style-type: none"> N+1 failover supported AI search (BestShot, Attribute) - When integrated with AI cameras PTZ camera configuration and control Dynamic layout Virtual channel view Fisheye dewarping 	<ul style="list-style-type: none"> N+1 failover supported AI search (BestShot, Attribute) - When integrated with AI cameras PTZ camera configuration and control Dynamic layout Fisheye dewarping



XRN-3220B4
32CH NVR

NEW



XRN-3210B4
32CH NVR



XRN-3210RB2
32CH NVR



XRN-3210B2
32CH NVR

OS	Linux	Linux	Linux	Linux
Supported Compression	H.265, H.264, MJPEG	H.265 / H.264, MJPEG, WiseStream	H.265 / H.264, MJPEG, WiseStream	H.265 / H.264, MJPEG, WiseStream
Max. Recording Bit Rate	520Mbps	400Mbps	400Mbps	400Mbps
Max # of Cameras	32CH	32CH	32CH	32CH
Network Camera Resolution	32MP ~ CIF	32MP ~ CIF	32MP ~ CIF	32MP ~ CIF
HDD Slot	16SATA (10TB per HDD)	16SATA (10TB per HDD)	8SATA (10TB per HDD)	8SATA (10TB per HDD)
Record Mode	Normal, Dual Stream, Schedule(Continuous/Event), Event (Pre/Post), Bookmark	Normal, Dual Stream, Schedule (Continuous/Event), Event (Pre/Post), Bookmark	Normal, Dual Stream, Schedule (Continuous/Event), Event (Pre/Post), Bookmark	Normal, Dual Stream, Schedule (Continuous/Event), Event (Pre/Post), Bookmark
Event Trigger	Alarm Input, Video Loss, Camera Event (Sensor, MD, Video Analytics, Defocus, Audio), Dynamic Event, User Event	Alarm Input, Video Loss, Camera Event (Sensor, MD, Video Analytics, Defocus, Audio), Dynamic Event, User Event	Alarm Input, Video Loss, Camera Event (Sensor, MD, Video Analytics, Defocus, Audio), Dynamic Event, User Event	Alarm Input, Video Loss, Camera Event (Sensor, MD, Video Analytics, Defocus, Audio), Dynamic Event, User Event
Event Action	e-Mail, Event Push, PTZ Preset, Alarm Out, Buzzer, Monitor Out, FTP, SUNAPI Command, Shutdown	e-Mail, Event Push, PTZ Preset, Alarm Out, Buzzer, Monitor Out, FTP, SUNAPI Command, Shutdown	e-Mail, Event Push, PTZ Preset, Alarm Out, Buzzer, Monitor Out, FTP, SUNAPI Command, Shutdown	e-Mail, Event Push, PTZ Preset, Alarm Out, Buzzer, Monitor Out, FTP, SUNAPI Command, Shutdown
External Storage	iSCSI storage	iSCSI	iSCSI	iSCSI
RAID	RAID-5/6	RAID 5/6	RAID 5/6	-
Hot Swap	Yes	Yes	Yes	-
Network Viewer Software	SSM, WAVE, Webviewer, Wisenet Viewer, Wisenet mobile Support CGI(SUNAPI) for integration to 3'rd party VMS	SSM, Webviewer, Smart Viewer, Wisenet mobile, Wisenet Viewer, Support CGI (SUNAPI) for integration to 3'rd party VMS	SSM, Webviewer, Smart Viewer, Wisenet mobile, Wisenet Viewer, Support CGI (SUNAPI) for integration to 3'rd party VMS	SSM, Webviewer, Smart Viewer, Wisenet mobile, Wisenet Viewer, Support CGI (SUNAPI) for integration to 3'rd party VMS
Local Monitor	Dynamic layout, Virtual channel view [Web] Dynamic layout	Support dual monitor HDMI 1 (Up to 4K), HDMI 2 (FHD)	Support dual monitor HDMI 1 (Up to 4K), HDMI 2 (FHD)	Support dual monitor HDMI 1 (Up to 4K), HDMI 2 (FHD)
Network Camera Protocol	SUNAPI, ONVIF	SUNAPI, ONVIF	SUNAPI, ONVIF	SUNAPI, ONVIF
Power Input	-	100 ~ 240 VAC ± 10%; 50/60 Hz, 2.7A	100 ~ 240 VAC ± 10%, 50/60 Hz	100 ~ 240 VAC ± 10%, 50/60 Hz
Power Consumption	-	Max. 265W (16 HDD)	Max. 160W (8 HDD)	Max. 138W (8 HDD)
PoE Budget	-	-	-	-
Additional Features	<ul style="list-style-type: none"> N+1 failover supported AI search (BestShot, Attribute) <ul style="list-style-type: none"> - When integrated with AI cameras PTZ camera configuration and control Fisheye dewarping 	<ul style="list-style-type: none"> N+1 failover supported AI search (BestShot, Attribute) <ul style="list-style-type: none"> - When integrated with AI cameras PTZ camera configuration and control Fisheye dewarping 	<ul style="list-style-type: none"> N+1 failover supported AI search (BestShot, Attribute) <ul style="list-style-type: none"> - When integrated with AI cameras PTZ camera configuration and control Fisheye dewarping 	<ul style="list-style-type: none"> N+1 failover supported AI search (BestShot, Attribute) <ul style="list-style-type: none"> - When integrated with AI cameras PTZ camera configuration and control Fisheye dewarping



XRN-1620SB1
16CH NVR



XRN-1620B2
16CH NVR



XRN-1620B2
16CH NVR



XRN-820S
8CH NVR



XRN-815S
8CH NVR

OS	Linux	Linux	Linux	Linux	Linux
Supported Compression	H.265 / H.264, MJPEG, WiseStream	H.265 / H.264, MJPEG			
Max. Recording Bit Rate	140Mbps	140Mbps	140Mbps	100Mbps	100Mbps
Max # of Cameras	16CH	16CH	16CH	8CH	8CH
Network Camera Resolution	32MP ~ CIF	32MP ~ CIF	32MP ~ CIF	32MP ~ CIF	12MP ~ CIF
HDD Slot	Up to 4 SATA (Max. 24TB)	Up to 4 SATA (Max. 24TB)	Up to 8 SATA (Max. 80TB)	Up to 2 SATA (Max. 12TB)	Up to 2 SATA (Max. 20TB)
Record Mode	Normal, Dual Stream, Schedule (Continuous/Event), Event (Pre/Post)	Normal, Dual Stream, Schedule (Continuous/Event), Event (Pre/Post), Bookmark			
Event Trigger	Alarm Input, Video Loss, Camera Event (Sensor, MD, Video Analytics, Defocus, Audio), Dynamic Event, User Event	Alarm Input, Video Loss, Camera Event (Sensor, MD, Video Analytics, Defocus, Audio), Dynamic Event, User Event	Alarm Input, Video Loss, Camera Event (Sensor, MD, Video Analytics, Defocus, Audio), Dynamic Event, User Event	Alarm Input, Video Loss, Camera Event (Sensor, MD, Video Analytics, Defocus, Audio), Dynamic Event, User Event	Alarm Input, Video Loss, Camera Event (Sensor, MD, Video Analytics, Defocus, Audio), Dynamic Event, User Event
Event Action	e-Mail, Event Push, PTZ Preset, Alarm Out, Buzzer, Monitor Out, FTP, SUNAPI Command, Shutdown	e-Mail, Event Push, PTZ Preset, Alarm Out, Buzzer, Monitor Out, FTP, SUNAPI Command, Shutdown	e-Mail, Event Push, PTZ Preset, Alarm Out, Buzzer, Monitor Out, FTP, SUNAPI Command, Shutdown	e-Mail, Event Push, PTZ Preset, Alarm Out, Buzzer, Monitor Out, FTP, SUNAPI Command, Shutdown	e-Mail, Event Push, PTZ Preset, Alarm Out, Buzzer, Monitor Out, FTP, SUNAPI Command, Shutdown
External Storage	-	-	-	-	-
RAID	-	-	-	-	-
Hot Swap	-	-	-	-	-
Network Viewer Software	SSM, Webviewer, Smart Viewer, Wisenet mobile, Wisenet Viewer, Support CGI (SUNAPI) for integration to 3'rd party VMS	SSM, Webviewer, Smart Viewer, Wisenet mobile, Wisenet Viewer, Support CGI (SUNAPI) for integration to 3'rd party VMS	SSM, Webviewer, Smart Viewer, Wisenet mobile, Wisenet Viewer, Support CGI (SUNAPI) for integration to 3'rd party VMS	SSM, Webviewer, Smart Viewer, Wisenet mobile, Wisenet Viewer, Support CGI (SUNAPI) for integration to 3'rd party VMS	SSM, Webviewer, Smart Viewer, Wisenet mobile, Wisenet Viewer, Support CGI (SUNAPI) for integration to 3'rd party VMS
Local Monitor	Support dual monitor HDMI 1 (Up to 4K), HDMI 2 (FHD)	Support dual monitor HDMI 1 (Up to 4K), HDMI 2 (FHD)	Support dual monitor HDMI 1 (Up to 4K), HDMI 2 (FHD)	Support dual monitor HDMI 1 (Up to 4K), HDMI 2 (FHD)	HDMI 1: 3840x2160(30Hz), HDMI 2: 1920x1080(60Hz)
Network Camera Protocol	SUNAPI, ONVIF				
Power Input	100 ~ 240 VAC ± 10%, 50/60Hz	100 ~ 240 VAC ± 10%, 50/60Hz	100 ~ 240 VAC ± 10%: 50/60Hz	100 ~ 240 VAC ± 10%, 50/60Hz	100 ~ 240 VAC ± 10%: 50/60Hz
Power Consumption	Max. 310W	Max. 310W	Max. 130W	Max. 160W	Max 165W (2HDD, PoE On)
PoE Budget	200W	200W	-	100W	100W
Additional Features	<ul style="list-style-type: none"> PoE supported N+1 failover supported AI search (BestShot, Attribute) <ul style="list-style-type: none"> When integrated with AI cameras PTZ camera configuration and control 	<ul style="list-style-type: none"> PoE supported N+1 failover supported AI search (BestShot, Attribute) <ul style="list-style-type: none"> When integrated with AI cameras PTZ camera configuration and control 	<ul style="list-style-type: none"> PoE supported N+1 failover supported AI search (BestShot, Attribute) <ul style="list-style-type: none"> When integrated with AI cameras PTZ camera configuration and control 	<ul style="list-style-type: none"> PoE supported N+1 failover supported AI search (BestShot, Attribute) <ul style="list-style-type: none"> When integrated with AI cameras PTZ camera configuration and control 	<ul style="list-style-type: none"> PoE supported N+1 failover supported AI search (BestShot, Attribute) <ul style="list-style-type: none"> When integrated with AI cameras PTZ camera configuration and control



XRN-420S
4CH NVR



QRN-1630S
16CH NVR



QRN-830S
8CH NVR



QRN-430S
4CH NVR

OS	Linux	Linux	Linux	Linux
Supported Compression	H.265/H.264, MJPEG	H.265 / H.264, MJPEG	H.265 / H.264, MJPEG	H.265 / H.264, MJPEG
Max. Recording Bit Rate	50Mbps	128Mbps	Max. 80Mbps	40Mbps
Max # of Cameras	4CH	16CH	8CH	4CH
Network Camera Resolution	8MP~CIF	8MP~CIF	8MP~CIF	8MP~CIF
HDD Slot	Up to 1 SATA (Max.6TB)	Up to 2 SATA (Max. 20TB)	Up to 1 SATA (Max. 6TB)	Up to 1 SATA (Max. 6TB)
Record Mode	Normal, Dual Stream, Schedule(Continuous/Event), Event(Pre/Post), Bookmark	Normal, Dual Stream, Schedule (Continuous/Event), Event (Pre/Post), Bookmark	Normal, Dual Stream, Schedule (Continuous/Event), Event (Pre/Post), Bookmark	Normal, Dual Stream, Schedule(Continuous/Event), Event (Pre/Post), Bookmark
Event Trigger	Alarm Input, Video Loss, Camera Event (Sensor, MD, Video Analytics, Defocus, Audio), Dynamic Event	Alarm Input, Video Loss, Camera Event (Sensor, MD, Video Analytics, Defocus, Audio), Dynamic Event, User Event	Alarm Input, Video Loss, Camera Event (Sensor, MD, Video Analytics, Defocus, Audio), Dynamic Event, User Event	Alarm Input, Video Loss, Camera Event(Sensor, MD, Video Analytics, Defocus, Audio), Dynamic Event
Event Action	e-Mail, Event Push, PTZ Preset, Alarm Out, Buzzer, Monitor Out	e-Mail, Event Push, PTZ Preset, Alarm Out, Buzzer, Monitor Out, FTP, SUNAPI Command, Shutdown	e-Mail, Event Push, PTZ Preset, Alarm Out, Buzzer, Monitor Out, FTP, SUNAPI Command, Shutdown	e-Mail, Event Push, PTZ Preset, Alarm Out, Buzzer, Monitor Out
External Storage	-	-	-	-
RAID	-	-	-	-
Hot Swap	-	-	-	-
Network Viewer Software	WAVE, SSM, Webviewer, Smart Viewer, Wisenet mobile Support CGI(SUNAPI) for integration to 3'rd party VMS	SSM, Webviewer, Smart Viewer, Wisenet mobile, Wisenet Viewer, Support CGI (SUNAPI) for integration to 3'rd party VMS	SSM, Webviewer, Smart Viewer, Wisenet mobile, Wisenet Viewer, Support CGI (SUNAPI) for integration to 3'rd party VMS	SSM, Webviewer, Smart Viewer, Wisenet mobile, Wisenet Viewer, Support CGI (SUNAPI) for integration to 3'rd party VMS
Local Monitor	HDMI: 3840x2160, VGA: 1920x1080	HDMI1: 3840 x 2160(30Hz), HDMI2: 1920 x 1080(60Hz)	HDMI :3840 x 2160 (30Hz)	HDMI 1 (Up to 4K)
Network Camera Protocol	SUNAPI, ONVIF	SUNAPI, ONVIF	SUNAPI, ONVIF	SUNAPI, ONVIF
Power Input	100~240 VAC ± 10%:50/60 Hz	100~240 VAC ± 10%: 50/60 Hz	54VDC / 1.55A	100~240 VAC ± 10%:50/60 Hz
Power Consumption	Max 67W(1HDD, PoE On)	Max. 200W (2HDD, PoE ON)	Max 84W (1HDD, PoE ON)	Max 52W (1HDD, PoE On)
PoE Budget	50W	130W	65W	35W
Additional Features	<ul style="list-style-type: none"> PoE supported N+1 failover supported AI search (BestShot, Attribute) -When integrated with AI cameras <ul style="list-style-type: none"> PTZ camera configuration and control 	<ul style="list-style-type: none"> PoE supported N+1 failover supported ARB (Auto Recovery Backup) redundancy supported PTZ camera configuration and control Easy configuration (Setup Wizard, P2P (QR Code)) 	<ul style="list-style-type: none"> PoE supported N+1 failover supported ARB (Auto Recovery Backup) redundancy supported PTZ camera configuration and control Easy configuration (Setup Wizard, P2P (QR Code)) 	<ul style="list-style-type: none"> PoE supported N+1 failover supported ARB (Auto Recovery Backup) redundancy supported PTZ camera configuration and control Easy configuration (Setup Wizard, P2P (QR Code))

Wisenet Viewer

Costless yet powerful NVR·DVR Management Software

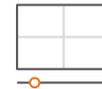


Monitoring with PC gets easier

- Supports multiple OS (Windows, macOS)
- Flexible channel division and custom layout
- AI search (Person, Face, Vehicle, LPR)
- Fisheye de-warping
- Displays web pages (ex. NVR web-viewer) and video tutorials
- Allows videos to be directly saved to PC
- Event trigger and action rule management
- Remote connection (DDNS/P2P)

* Available on Windows, macOS

Effective monitoring with essential features



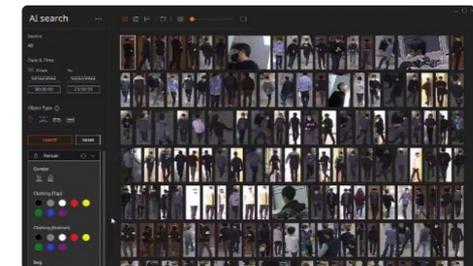
Customizable
channel layout & Timeline



Easy monitoring with
Fisheye De-warping



Intelligent monitoring
powered by AI Search



Encoder



SPE-1630
16CH Encoder



SPE-420
4CH Encoder



SPE-410
4CH Encoder



SPE-110
1CH Encoder

Max. # of Cameras	16	4	4	1
Supported Compression	H.265 / H.264, MJPEG	H.265 / H.264, MJPEG	H.264, MJPEG	H.264, MJPEG
Max. Resolution	5MP/4MP/1080p/720p/WD1/4CIF/CIF	5MP/4MP/1080p/720p/WD1/4CIF/CIF	4MP/1080p/720p/WD1/4CIF/CIF	4MP/1080p/720p/WD1/4CIF/CIF
Max. Frame Rate per Channel	5MP: 12fps/CH, 4MP: 15fps/CH, 1080p/720p/WD1/4CIF/CIF: 30fps/CH(N), 25fps/CH(P)	5MP: 12fps/CH, 4MP: 15fps/CH, 1080p/720p/WD1/4CIF/CIF: 30fps/CH(N), 25fps/CH(P)	4MP: 15fps 1080p/720p/WD1/4CIF/CIF: 30fps(N), 25fps(P)	4MP: 15fps 1080p/720p/WD1/4CIF/CIF: 30fps(N), 25fps(P)
Bi-Directional Audio	Support	Support	Support	-
RS-485	Support	Support	Support	Support
Alarm I/O	4 / 1	4 / 2	4 / 2	-
Application Programming Interface	ONVIF profile S, SUNAPI	ONVIF profile S, SUNAPI	ONVIF profile S, SUNAPI	ONVIF profile S, SUNAPI
Power	MAX: 20W (12V, 1.67A)	MAX: 5W (PoE & 12VDC)	PoE & 12VDC: Max 9.6W	PoE: Max 4W 12VDC: Max 3.6W

Decoder



SPD-152
1 Monitor Decoder

Video Out	HDMI (2ea)
Resolution	HDMI# 1 up to 4K, HDMI# 2 up to 1080p
Display	Max. 64ch decoding Decoding performance: 8M@60fps, 2M@360fps
Power	Dual Power: 12VDC, PoE (IEEE802.3af)
Additional Features	Multi adapter for monitor back mount (VESA)

Wisenet WAVE

Video Management System

Intuitive and Easy to Use

- An intuitive 'drag & drop' tool makes it extremely easy for operators to set up a display of live and recorded images on a single screen or video wall, with customizable layouts and sizes.
- Zoom windows which, with just simple clicks of a mouse, enables operators to zoom in to see close up detail of any suspicious activity.
- Motion detection and video analytics support can be configured to generate alerts when user defined incidents occur.
- A wide range of smart, keyword, calendar and preview search options facilitate rapid retrieval of recorded video.

Wisenet WAVE targets the needs of projects in the mid-market with an emphasis on simplified user experience.

An Operating System to Suit Your Needs

Wisenet WAVE has applications for all major operating systems so our users are not limited by what device or operating system they choose to use on their desktops, mobile devices, rack mount servers, or even low-powered embedded devices. (For embedded devices, please contact **Hanwha Vision Support**)



WAVE Sync

A cloud-based service that enables simple, centralized remote access and insight into any Wisenet WAVE system.



Desktop

A rich media player designed to view and manage a single Wisenet WAVE system from a desktop or laptop PC.



Mobile

A mobile app designed for viewing Wisenet WAVE system video and archives while on-the-go.



Server

A media server responsible for discovering, connecting to, and managing system devices and data.

Supported Browsers	Desktop OS Support	Mobile OS Support	Server OS Support
Google Chrome	Microsoft Windows	Google Android	Microsoft Windows
Mozilla Firefox	Ubuntu Linux	Apple iOS	Ubuntu Linux
Opera / Opera Neon	Apple macOS		
Microsoft Edge			
Apple Safari			

Cloud

Wisenet WAVE Sync Simplifies Everything

A cloud-based service which can be remotely accessed by an unlimited number of authorized users from anywhere in the world.

Setup in Seconds

- Step 1: Create Wisenet WAVE Sync Account
- Step 2: Link your System to Wisenet WAVE Sync
- Step 3: Connect, View and Manage from anywhere



Wisenet WAVE

Desktop

The Ultimate Flexibility

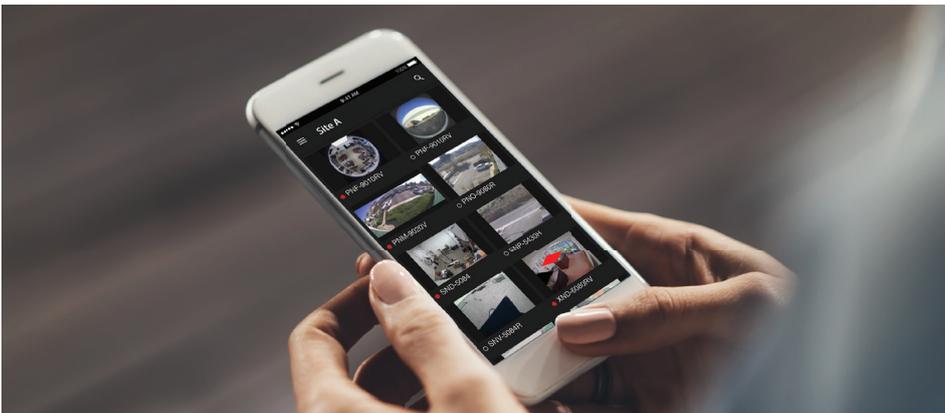
Wisenet WAVE offers a wide range of options to allow users to choose how and where to manage their video surveillance systems with minimal hardware requirements. Wisenet WAVE is offered as software which can be installed onto a user's desktop running Windows, Linux or Apple devices.



Mobile

Smart Phone. Smart Video.

A mobile app provides the opportunity to remotely access the key functions of Wisenet WAVE from a smart device to enable 'on-the-road' users to view and respond to any incidents captured by connected cameras.



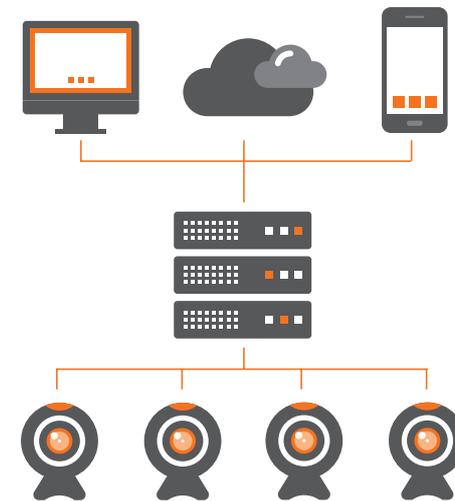
Server

Lightweight. Powerful. Server Hive.

The Wisenet WAVE server application is the foundation of the entire platform - with the ability to operate alone or as one part of a hive.

Wisenet WAVE is available as a downloadable software application from the **Hanwha Vision** website which enables the installers to easily and effortlessly install and configure.

The supporting web-based application enables each Wisenet WAVE platform to be managed as a stand alone system or as part of a larger, scalable video management solution. The application also provides an audit trail, real-time health monitoring and camera failover support, as well as reports on server health and storage status.



Server Hive

Connect to any Server w/ any Client

- Instant synchronization
- No single point of failure
- Automatic failover
- One-click upgrades

Wisenet SSM

Ideal choice for integrated monitoring

Wisenet SSM (Smart Security Manager) is a video monitoring software that maximizes the operational efficiency of Wisenet products (Network camera, Encoder, DVR and NVR). Hanwha Vision provides video surveillance products and also in-house developed Wisenet software to monitor whole systems. It provides seamless system integration and central monitoring with cost effectiveness and reliability.



Cost Competitiveness

Offer major features of video surveillance in reasonable price

One time licensing cost (No cost for upgrades and maintenance)

High quality VMS features for the price

High reliability

Superb device compatibility offered as a VMS of device manufacturer

Integrated operation of H/W and S/W for efficient maintenance and management

Dashboard that can monitor device status

Convenient Operation

A single manufacturer providing unified user experience

Be the first to use the latest device features

Offer various solutions for user environments

AI video search

Connect Hanwha AI cameras to SSM for various search features adopting AI algorithms.

• Best Shot search using unique attributes

System operators can utilize SSM's 'AI video search' feature to easily search specific events in the video by designating distinctive attributes of objects such as persons, faces, and vehicles. If a user searches specific attributes such as red motorcycle or a man wearing short pants, the best still cuts (Best Shot) of the classified objects in the video will be retrieved. Best Shots can be used as forensic data for accident investigations, playing back video that includes Best Shots.



Hanwha SSM search
Support quick search using attributes



Best Shot
Object detection & classification (Person, face, vehicle, license plate)

Parking management solution

Connect ANPR cameras to Wisenet SSM for various parking management features.

• Vehicle management & event search

Hanwha SSM's parking management solution utilizes ANPR (Automatic number plate recognition) cameras offering real-time parking entrance/exit monitoring. Users can register and manage vehicles without additional parking management software, while simple search feature quickly searches and retrieves vehicle footage.

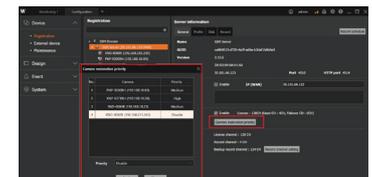


Stable monitoring

SSM provides safe and stable monitoring environment through Failover.

• Vehicle management & event search

Failover priority (High, medium, never) can be configured for each channel. If a camera is failed, high priority cameras will be failed over at first. Users can record and save important footages without loss of data.





XRP-4310DB4
128CH Server NVR (SSM Appliance)



XRP-4210B4
72CH Server NVR (SSM Appliance)

OS	Windows 10 IoT Enterprise (SSM preinstalled)	Windows 10 IoT Enterprise (SSM preinstalled)
Supported Compression	H.265 / H.264, MJPEG, WiseStream	H.265 / H.264, MJPEG, WiseStream
Max. Recording Bit Rate	400Mbps	400Mbps
Max # of Cameras	128CH (If clustering, 132CH)	72CH (If clustering, 132CH)
Network Camera Resolution	32MP ~ CIF	32MP ~ CIF
HDD Slot	SATA 16ea (3.5" 16ea Hot Swap – Volume 2ea)	SATA 16ea (3.5" 16ea Hot Swap – Volume 2ea)
Record Mode	Normal, Schedule (Continuous / Event), Event (Pre / Post), Event Profile, ARB, Dual-Track	Normal, Schedule (Continuous / Event), Event (Pre / Post), Event Profile, ARB, Dual-Track
Event Trigger	Video loss, Camera event (Sensor, MD, Passing, Entering, Exiting, Disappearing (Appearing), Tampering, Tracking, Face Detection, Audio Detection, ANPR, Bestshot), AI Event (Face, Appearance, Face mask, Vehicle)	Video loss, Camera event (Sensor, MD, Passing, Entering, Exiting, Disappearing (Appearing), Tampering, Tracking, Face Detection, Audio Detection, ANPR, Bestshot), AI Event (Face, Appearance, Face mask, Vehicle)
Event Action	Instant Viewer, Preset, Alarm Out, Pop-up, Sound and E-mail notification	Instant Viewer, Preset, Alarm Out, Pop-up, Sound and E-mail notification
External Storage	-	-
RAID	RAID 1 / 5 / 6 / 10 / 50	RAID 1 / 5 / 6 / 10 / 50
Hot Swap	Yes	Yes
Network Viewer Software	SSM Client, SSM Mobile	SSM Client, SSM Mobile
Local Monitor	Dual if Full HD monitor Single if UHD monitor	Dual if Full HD monitor Single if UHD monitor
Network Camera Protocol	Wisenet, ONVIF	Wisenet, ONVIF
Power Input	100 ~ 240VAC, 50 ~ 60Hz	100 ~ 240VAC, 50 ~ 60Hz
Power Consumption	250W Dual	250W Single
PoE Budget	-	-
Additional Features	<ul style="list-style-type: none"> • SSM Preinstalled • Redundant Power Support • ARB (Auto Recovery Backup) redundancy supported • AI Event (Face, Appearance, Face mask, Vehicle) Trigger 	<ul style="list-style-type: none"> • SSM Preinstalled • ARB (Auto Recovery Backup) redundancy supported • AI Event (Face, Appearance, Face mask, Vehicle) Trigger

Wisenet Access Software 2.2

Wisenet Access Software is access control management software integrated with Wisenet SSM for Total security solution. It is highly scalable up to unlimited doors system and has robust software architecture.

ACSMonitoring



Fire Alarm



Lift Control



Key Features

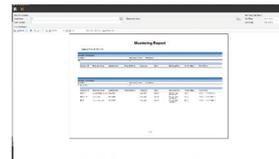
- **Interlocking**
Control the locking of two or more doors
If one door is opened or unlocked, the remaining doors refuse access
- **Mustering Report**
Provide information of the occupants in the fire grouping area based in Fire event
- **Role Based Access**
Configure Role-based rules to provide access to a door (Multiple cards access)
- **LDAP integration**
Synchronize Active Directory "Security group" users to have the same "Access Group", "Company", "Department" in WACS
- **Lift access control**
Provide Access control for LIFT up to 12floors per output board (V300, X300)
- **Guard Tour**
Provide Guard Tour : Sequential, Time Bound types



Configuration

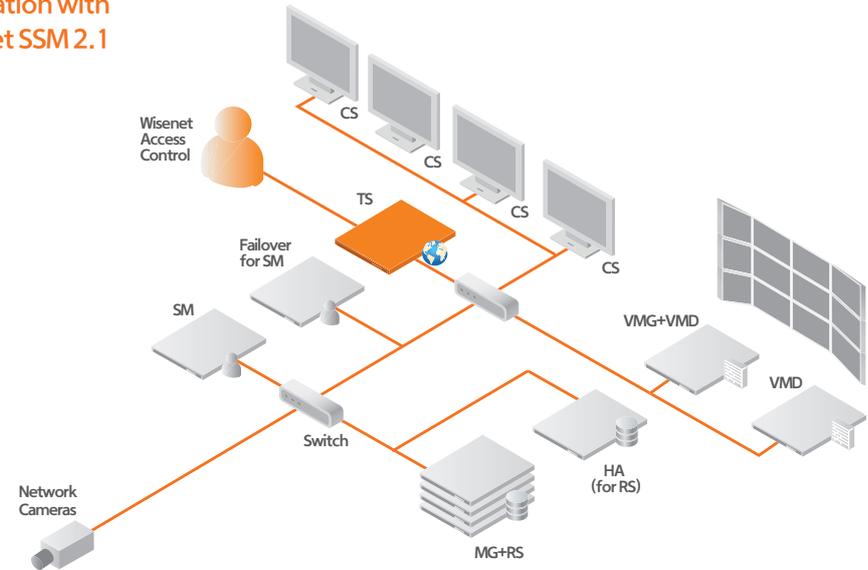


Monitoring



Mustering Report

Integration with Wisenet SSM 2.1



Access Control	Device auto discovery Cardholder management Batch uploads Card (s) pre-registration Lift Control Role based ACS Device maintenance	Unlimited access groups, Time schedules Interlocking Area / Zone management Biometric readers (FP, Face) Visitor Management Global APB, I/O Guard Tour
Monitoring	Real time access events & alarm monitoring Graphic maps Remote door management (Close / Open) I/O monitoring	Mustering Configure Event Specific Instructions for Operators Event Filtering for Monitoring Control Door Monitoring/ Management permissions per User
Card Design and Printing	Create multiple design templates Auto-fill card holder data from system database Print cards	
Fire Groups	Create fire-groups for each fire sensor input	
Advanced Reporting	Extensive reporting options Export to multiple formats (excel, pdf, word etc.) Meal Count Report	
Video Integration with Wisenet SSM	Seamless Integration with Hanwha Vision 's VMS in event monitoring Review video of the access & alarms events Real-time access & alarms events notification to Wisenet SSM	
Maintenance	User group & user privileges Manual & scheduled database backup Database restore	Data export & import Custom fields Auditing & user activity logs
System	Unlimited doors Very simple and intuitive user interface Highly scalable	

Reader



**Signo 20/20K/40/40K
Card / Keypad Reader**



**U90
Long Range UHF Reader**



**BioEntry W2
Fingerprint / Card Reader**



**BioMini
Fingerprint Scanner**

Credential Compatibility	125KHz/ 13.56Mhz	902~928 MHz	13.56Mhz	-
Communication	Wiegand/Clock & Data/BLE/NFC	Wiegand	Wiegand	USB 2.0
Compatible Access Cards	Standard Profile : iClass SE/SEOS, MIFARE (Classic/SIO), HID Prox, EM4102, MIFARE DESFire EV1 /EV2 (CSN/SIO) SEOS Profile : iClass SEOS	UHF Card	iCLASS SE/SEOS, MIFARE (Classic) / DESFire EV1 CSN	-
Keypad	No / Yes (6x2) / No / Yes (4x3)	-	-	-
Operating Voltage Range	12V DC	12V DC or 24V DC	12V DC	USB 2.0
Operating Temperature	-35°C ~ 66°C (-31°F ~ 150°F)	-35°C ~ +65°C (-31°F ~ +150°F)	-20°C ~ +50°C (-4°F ~ +122°F)	-10°C ~ +50°C (+14°F ~ +122°F)
Ingress Protection	IP65	IP65	IP67	-
Impact Protection	-	-	IK08	-
Panel Connection	Pigtail	Pigtail	Pigtail	-
Color	Black with silver	Black	Dark Gray	Dark Gray
OSDP	Support	-	-	-
Max. User	-	-	500,000 (1 : 1), 100,000 (1 : N)	-
Max. Fingerprint Template	-	-	1,000,000 (1 : 1), 200,000 (1 : N)	-
Ethernet	-	-	10/100Mbps	-

Controller



**X1100
Hybrid controller**



**X100/X200/X300
Expansion Reader / Input / Output Module**

Communication	Ethernet (10/100)/RS-485	RS-485
Reader interface	2ea	2ea / -
Max. expansion board	32ea	-
Max. card holders	250,000	-
Max. Event buffers	50,000	-
Input port	7ea	7ea/ 19ea/ 3ea
Output port	4ea	4ea/ 2ea/ 12ea
Operating Temperature	0°C ~ 70°C (32°F ~ 158°F)	0°C ~ 70°C (32°F ~ 158° F)
PoE	-	-
Color	Gray	Gray
OSDP	Yes	Yes

Peripheral



**SSA-X300
Power Package**

Controller/ Interface On Board	Max. 2ea Boards in enclosure
Input Power	100 ~ 240V AC (50Hz/60Hz) / 2.0A
Power Consumption	13.5V ± 5%, 4.7A (Strobe, Horn 12.5V DC ± 5%)
Charging Current	700mA
Back up Battery	12V, 18Ah, rechargeable
SMPS Status Transmission	AC loss, Battery fail (Non battery)
AC Input Protection	by Fuse in input port
Operation Temperature	0°C ~ +45°C (+32°F ~ +113°F)
Case Lock	Lock on front door with keys
Dimension (mm)	W410 x H410 x D97mm (16.14" x 16.14" x 3.82")

Card



**iCLASS SEOS (Elite)
13.56MHz**



Mobile Subscription

**UHF Card
902~928 MHz Card**

<ul style="list-style-type: none"> • 13.56Mhz • Compatible with Signo 20 (k)/40K, R10 EXP • Encoded by Hanwha Vision unique format (Elite) 	<ul style="list-style-type: none"> • Bluetooth/NFC via mobile device (Android, IOS) 	<ul style="list-style-type: none"> • Long range card (3~5m)
--	--	--

IP Audio System

IP audio meets network surveillance system for better safety and operational efficiency in daily life.



 Motion Detection

 Please stay away from the fence



TTS
Text To Speech



PoE & PoE+
Dual Support +



SIP
PBX integration



Scheduler
Day, Week, Month and Year

IP Speakers



NEW



SPA-C110B/SPA-C110W
Ceiling Speaker

SPA-C100B / SPA-C100W
Ceiling Speaker

SPA-P100B/SPA-P100W
Pendant speaker

SPA-W100B / SPA-W100W
Wall speaker

SPA-H100B/SPA-H100W
Horn speaker

Amplifier	Built in 10W Class D	Built in 10W Class D	Built in 10W Class D	Built in 10W Class D	Built in 10W Class D
Ethernet	10/100 Base-T	10/100 Base-T	10/100 Base-T	10/100 Base-T	10/100 Base-T
Internal Memory	1 GBytes	1 GBytes	1 GBytes	1 GBytes	1 GBytes
Max. Sound Pressure Level	100dB	100dB	101dB	101dB	125dB
Frequency Range (-10dB)	120Hz~20kHz	120Hz~20kHz	130Hz~20kHz	120Hz~20kHz	650Hz~5.3kHz
Sensitivity (1Watt)	90dB	90dB	91dB	91dB	111dB
Power	PoE/ PoE+				
TTS	Korean, English(US, UK), German, French, Spanish, Russian				

IP Audio Module



SPA-D1000
Audio Module

IP Audio Server



SPA-S1000
Audio Server

SIP Microphone



NEW

SPA-M2000
Microphone

Amplifier	Built in 10W Class D
Ethernet	10/100 Base-T
Internal Memory	1 GBytes

Ethernet	100/1000 Base-T
Power	AC 120~240V, 50/60Hz, 10W DC 24V, 350mA
Functional Monitoring	Connection verification, Built-in system logging

Ethernet	10/100 Base-T
Operating Temperature	-10 ~ +40°C (+14° F ~ +104° F)
Operating Humidity	10~85% RH (Non-Condensing)

IP Microphone



SPA-M1000
Microphone

Ethernet	100/1000 Base-T
Mic Input Sensitivity	-50dBV ± 3dB
Mic Frequency Response	100Hz ~ 18kHz
Power	Max. 10W, DC24V PoE (IEEE 802.3 af type 1 Class 3)
Functional Monitoring	Connection verification, Built-in system logging

IP Audio Bridge



NEW

SPA-B1000
IP Audio Bridge

Ethernet	10/100 Base-T
Operating Temperature	-20 ~ +50°C (-4° F ~ +122° F)
Operating Humidity	10~85% RH (Non-Condensing)



HCB-7000A
QHD Box Camera



HCO-7070RA
QHD IR Bullet Camera



HCO-7010RA/20RA/30RA
QHD IR Bullet Camera



HCD-7070RA
QHD IR Dome Camera



HCD-7010RA/20RA/30RA
QHD IR Dome Camera

	HCB-7000A QHD Box Camera	HCO-7070RA QHD IR Bullet Camera	HCO-7010RA/20RA/30RA QHD IR Bullet Camera	HCD-7070RA QHD IR Dome Camera	HCD-7010RA/20RA/30RA QHD IR Dome Camera
Imaging Device	1/3" CMOS	1/3" CMOS	1/3" CMOS	1/3" CMOS	1/3" CMOS
Resolution	2560 x 1440	2560 x 1440	2560 x 1440	2560 x 1440	2560 x 1440
Min. Illumination	Color: 0.16Lux (F1.2) B/W: 0.009Lux (F1.2)	Color: 0.16Lux (F1.6) B/W: 0Lux (IR LED on)	Color: 0.26Lux (F1.8) (HCO-7010R) 0.27Lux (F2.0) (HCO-7020R/7030R) B/W: 0Lux (IR LED on)	Color: 0.16Lux (F1.6) B/W: 0Lux (IR LED on)	Color: 0.26Lux (F1.8) (HCD-7010RA) 0.27Lux (F2.0) (HCD-7020R/7030RA) B/W: 0Lux (IR LED on)
Focal Length	-	3.2 ~ 10mm (3.1x) varifocal	2.8mm fixed (HCO-7010R) 4.0mm fixed (HCO-7020R) 6.0mm fixed (HCO-7030R)	3.2 ~ 10mm (3.1x) varifocal	2.8mm fixed (HCD-7010RA) 4.0mm fixed (HCD-7020RA) 6.0mm fixed (HCD-7030RA)
Angular Field of View	-	H: 93.48° (Wide) ~ 29.44° (Tele) V: 50.47° (Wide) ~ 16.64° (Tele) D: 112.53° (Wide) ~ 33.7° (Tele)	H: 107.48° / V: 59.67° / D: 122.01° (HCO-7010RA) H: 78.22° / V: 41.21° / D: 87.91° (HCO-7020RA) H: 49.01° / V: 27.61° / D: 55.6° (HCO-7030RA)	H: 93.48° (Wide) ~ 29.44° (Tele) V: 50.47° (Wide) ~ 16.64° (Tele) D: 112.53° (Wide) ~ 33.7° (Tele)	H: 107.48° / V: 59.67° / D: 122.01° (HCD-7010RA) H: 78.22° / V: 41.21° / D: 87.91° (HCD-7020RA) H: 49.02° / V: 27.61° / D: 55.6° (HCD-7030RA)
Pan / Tilt / Rotate	-	-	-	0° ~ 350° / 0° ~ 63° / 0° ~ 355°	0° ~ 350° / 0° ~ 67° / 0° ~ 355°
IR Viewable Length	-	30m (98.43ft)	20m (65.62ft) (HCO-7010R) 25m (82.02ft) (HCO-7020R) 30m (98.43ft) (HCO-7030R)	20m (65.62ft)	20m (65.62ft) (HCD-7010RA) 25m (82.02ft) (HCD-7020RA) 30m (98.43ft) (HCD-7030RA)
Day & Night	Auto (ICR)	Auto (ICR)	Auto (ICR)	Auto (ICR)	Auto (ICR)
Backlight Compensation	BLC/HLC/DWDR	BLC/HLC/DWDR	BLC/HLC/DWDR	BLC/HLC/DWDR	BLC/HLC/DWDR
Digital Noise Reduction	2D DNR	2D DNR	2D DNR	2D DNR	2D DNR
Motion detection	Support	Support	Support	Support	Support
Privacy Masking	2 Zones	2 Zones	2 Zones	2 Zones	2 Zones
Alarm I/O	0/1	0/1	0/1	0/1	MD Output 1
Protocol	AHD: ACP (AHD Coax Protocol), CVBS: Pelco-C (Coaxitron) RS-485: Samsung T, Pelco D/P	AHD: ACP (AHD Coax Protocol), CVBS: Pelco-C (Coaxitron)	AHD: ACP (AHD Coax Protocol), CVBS: Pelco-C (Coaxitron)	AHD: ACP (AHD Coax Protocol), CVBS: Pelco-C (Coaxitron)	AHD: ACP (AHD Coax Protocol), CVBS: Pelco-C (Coaxitron)
Operating Temperature	-10°C ~ +55°C (+14°F ~ +131°F)	-30°C ~ +55°C (-22°F ~ +131°F) * Start up above -10°C (+14°F)	-30°C ~ +55°C (-22°F ~ +131°F) * Start up above -10°C (+14°F)	-10°C ~ +55°C (+14°F ~ +131°F)	-10°C ~ +55°C (+14°F ~ +131°F)
Certification	-	IP66, IK10	IP66, IK10	-	-
Power Consumption	12VDC & 24VAC: Max 3.6W	12VDC & 24VAC: Max 5.8W	12VDC: Max 5W	12VDC & 24VAC: Max 5.8W	12VDC: Max 5W
Dimensions (WxHxD) / Weight	W 59.6 x H 68.4 x D 92.7mm (2.35" x 2.69" x 3.65") 186g (0.41lb)	Ø 78 x 259.8mm (Ø 3.07" x 10.23") (Without sunshield) 914g (2.02lb)	Ø 70 x 246mm (Ø 2.76" x 9.69") (Without sunshield) 670g (1.48lb)	Ø 119.8 x 98.5mm (Ø 4.72" x 3.88") 320g (0.71lb)	Ø 110.1 x 86.1mm (Ø 4.33" x 3.39") 240g (0.53lb)
Additional Features	Video Transmission up to 500m (5C2V Coaxial Cable)	Video Transmission up to 500m (5C2V Coaxial Cable)	Video Transmission up to 500m (5C2V Coaxial Cable)	Video Transmission up to 500m (5C2V Coaxial Cable)	Video Transmission up to 500m (5C2V Coaxial Cable)



HCV-7070RA
QHD IR Vandal Dome Camera



HCV-7010RA/20RA/30RA
QHD IR Vandal Dome Camera



HCB-6001
1080p HD Box Camera



HCB-6000
1080p HD Box Camera



HCO-6080R
1080p HD IR Bullet Camera

	HCV-7070RA QHD IR Vandal Dome Camera	HCV-7010RA/20RA/30RA QHD IR Vandal Dome Camera	HCB-6001 1080p HD Box Camera	HCB-6000 1080p HD Box Camera	HCO-6080R 1080p HD IR Bullet Camera
Imaging Device	1/3" CMOS	1/3" CMOS	1/2.8" CMOS	1/2.8" CMOS	1/2.8" CMOS
Resolution	2560 x 1440	2560 x 1440	1920 x 1080	1920 x 1080	1920 x 1080
Min. Illumination	Color: 0.16Lux (F1.6) B/W: 0Lux (IR LED on)	Color: 0.26Lux (F1.8) (HCV-7010R) 0.27Lux (F2.0) (HCV-7020R/7030R) B/W: 0Lux (IR LED on)	Color: 0.09Lux (F1.2) B/W: 0.009Lux (F1.2)	Color: 0.09Lux (F1.2) B/W: 0.009Lux (F1.2)	Color: 0.11Lux (F1.6) B/W: 0Lux (IR LED on)
Focal Length	3.2 ~ 10mm (3.1x) varifocal	2.8mm fixed (HCV-7010R) 4.0mm fixed (HCV-7020R) 6.0mm fixed (HCV-7030R)	-	-	3.2 ~ 10mm (3.1x) motorized varifocal
Angular Field of View	H: 93.48° (Wide) ~ 29.44° (Tele) V: 50.47° (Wide) ~ 16.64° (Tele) D: 112.53° (Wide) ~ 33.7° (Tele)	H: 107.48° / V: 59.67° / D: 122.01° (HCV-7010R) H: 78.22° / V: 41.21° / D: 87.91° (HCV-7020R) H: 49.01° / V: 27.61° / D: 55.6° (HCV-7030R)	-	-	H: 110.2° (Wide) ~ 32° (Tele) V: 55.4° (Wide) ~ 18° (Tele) D: 128.4° (Wide) ~ 36.6° (Tele)
Pan / Tilt / Rotate	0° ~ 350° / 0° ~ 67° / 0° ~ 355°	0° ~ 350° / 0° ~ 67° / 0° ~ 355°	-	-	-
IR Viewable Length	30m (98.43ft)	20m (65.62ft) (HCV-7010R) 25m (82.02ft) (HCV-7020R) 30m (98.43ft) (HCV-7030R)	-	-	30m (98.43ft)
Day & Night	Auto (ICR)	Auto (ICR)	Auto (ICR)	Auto (ICR)	Auto (ICR)
Backlight Compensation	BLC / HLC / DWDR	BLC/HLC/DWDR	WDR (120dB)	WDR (120dB)	WDR (120dB)
Digital Noise Reduction	2D DNR	2D DNR	SSNRIV	SSNRIV	SSNRIV
Motion detection	Support	Support	Support	Support	Support
Privacy Masking	2 Zones	2 Zones	4 Zones	8 Zones	8 Zones
Alarm I/O	MD Output 1	MD Output 1	MD Output 1	MD Output 1	MD Output 1
Protocol	AHD: ACP (AHD Coax Protocol), CVBS: Pelco-C (Coaxitron)	AHD: ACP (AHD Coax Protocol), CVBS: Pelco-C (Coaxitron)	AHD: ACP (AHD Coax Protocol), CVBS: Pelco-C (Coaxitron), CCP (CVI Coax Protocol), TCP (TVI Coax Protocol), RS-485: Samsung T, Pelco D/P, Panasonic, Bosch, Honeywell, Vicon, GE, AD	AHD: ACP (AHD Coax Protocol), CVBS: Pelco-C (Coaxitron), CCP (CVI Coax Protocol), TCP (TVI Coax Protocol), RS-485: Samsung T, Pelco D/P, Panasonic, Bosch, Honeywell, Vicon, GE, AD	AHD: ACP (AHD Coax Protocol), CVBS: Pelco-C (Coaxitron), CCP (CVI Coax Protocol), TCP (TVI Coax Protocol)
Operating Temperature	-30°C ~ +55°C (-22°F ~ +131°F) * Start up above -10°C (+14°F)	-30°C ~ +55°C (-22°F ~ +131°F) * Start up above -10°C (+14°F)	-10°C ~ +55°C (+14°F ~ +131°F)	-10°C ~ +55°C (+14°F ~ +131°F)	-30°C ~ +55°C (-22°F ~ +131°F) * Start up above -10°C (+14°F)
Certification	IP66, IK10	IP66, IK10	-	-	IP66, IK10
Power Consumption	12VDC & 24VAC: Max 5.8W	12VDC: Max 5W	12VDC & 24VAC: Max 6W	12VDC & 24VAC: Max 3.5W	12VDC & 24VAC: Max 5.8W
Dimensions (WxHxD) / Weight	Ø137 x 106.1mm (Ø5.39" x 4.18") 715g (1.58lb)	Ø120.3 x 91.7mm (Ø4.74" x 3.61") 510g (1.12lb)	W 130.9 x H 73.1 x D 67.2mm (5.15" x 2.88" x 2.65") 287g (0.63lb)	W 68.4 x H 59.6 x D 92.7mm (2.69" x 2.35" x 3.65") 186g (0.41lb)	Ø78 x 259.8mm (Ø3.07" x 10.23") (Without sunshield) 948g (2.09lb)
Additional Features	Video Transmission up to 500m (5C2V Coaxial Cable)	Video Transmission up to 500m (5C2V Coaxial Cable)	Video transmission up to 500m (5C2V Coaxial Cable)	Video transmission up to 500m (5C2V Coaxial Cable)	Video transmission up to 500m (5C2V Coaxial Cable)



HCO-6070R
1080p HD IR Bullet Camera



HCO-6020R
1080p HD IR Bullet Camera



HCD-6080R/6070R
1080p HD IR Dome Camera



HCD-6020R
1080p HD IR Dome Camera

Imaging Device	1/2.8" CMOS	1/2.8" CMOS	1/2.8" CMOS	1/2.8" CMOS
Resolution	1920 x 1080	1920 x 1080	1920 x 1080	1920 x 1080
Min. Illumination	Color: 0.11Lux (F1.6) B/W: 0Lux (IR LED on)	Color: 0.17Lux (F1.6) B/W: 0Lux (IR LED on)	Color: 0.11Lux (F1.6) B/W: 0Lux (IR LED on)	Color: 0.17Lux (F1.6) B/W: 0Lux (IR LED on)
Focal Length	3.2 ~ 10mm (3.1x) varifocal	4mm fixed (F1.6)	3.2 ~ 10mm (3.1x) motorized varifocal (HCD-6080R) varifocal (HCD-6070R)	4mm fixed (F1.6)
Angular Field of View	H: 110.2° (Wide) ~ 32° (Tele) V: 55.4° (Wide) ~ 18° (Tele) D: 128.4° (Wide) ~ 36.6° (Tele)	H: 87.6° / V: 46.4° / D: 104.5°	H: 110.2° (Wide) ~ 32° (Tele) V: 55.4° (Wide) ~ 18° (Tele) D: 128.4° (Wide) ~ 36.6° (Tele)	H: 87.6° / V: 46.4° / D: 104.5°
Pan / Tilt / Rotate	-	-	0° ~ 350° / 0° ~ 67° / 0° ~ 355°	0° ~ 350° / 0° ~ 67° / 0° ~ 355°
IR Viewable Length	30m (98.43ft)	30m (98.43ft)	20m (65.62ft)	20m (65.62ft)
Day & Night	Auto (ICR)	Auto (ICR)	Auto (ICR)	Auto (ICR)
Backlight Compensation	WDR (120dB)	WDR (120dB)	WDR (120dB)	WDR (120dB)
Digital Noise Reduction	SSNRIV	SSNRIV	SSNRIV	SSNRIV
Motion detection	Support	Support	Support	Support
Privacy Masking	8 Zones	8 Zones	8 Zones	8 Zones
Alarm I/O	MD Output 1	-	MD Output 1	-
Protocol	AHD: ACP (AHD Coax Protocol), CVBS: Pelco-C (Coaxitron), CCP (CVI Coax Protocol), TCP (TVI Coax Protocol)	AHD: ACP (AHD Coax Protocol), CVBS: Pelco-C (Coaxitron), CCP (CVI Coax Protocol), TCP (TVI Coax Protocol)	AHD: ACP (AHD Coax Protocol), CVBS: Pelco-C (Coaxitron), CCP (CVI Coax Protocol), TCP (TVI Coax Protocol)	AHD: ACP (AHD Coax Protocol), CVBS: Pelco-C (Coaxitron), CCP (CVI Coax Protocol), TCP (TVI Coax Protocol)
Operating Temperature	-30°C ~ +55°C (-22°F ~ +131°F) *Start up above -10°C (+14°F)	-30°C ~ +55°C (-22°F ~ +131°F) *Start up above -10°C (+14°F)	-10°C ~ +55°C (+14°F ~ +131°F)	-10°C ~ +55°C (+14°F ~ +131°F)
Certification	IP66, IK10	IP66	-	-
Power Consumption	12VDC & 24VAC: Max 6W	12VDC: Max 5.4W	12VDC & 24VAC: Max 5.8W (HCD-6080R) 12VDC & 24VAC: Max 4.2W (HCD-6070R)	12VDC: Max 5.4W
Dimensions (WxHxD) / Weight	Ø78 x 259.8mm (Ø3.07" x 10.23") (Without sunshield) 914g (2.02lb)	Ø58.6 x 165.2mm (Ø2.31" x 6.5") (Without sunshield) 279g (0.62lb)	Ø119.8 x 98.5mm (Ø4.72" x 3.88") 330g (0.73lb) (HCD-6080R) 320g (0.71lb) (HCD-6070R)	Ø110 x 86mm (Ø4.33" x 3.39") 320g (0.71lb)
Additional Features	Video transmission up to 500m (5C2V Coaxial Cable)			



HCD-6010
1080p HD Dome Camera



HCV-6080R/6070R
1080p HD IR Vandal Dome Camera



SCB-6005
1080p HD Box Camera



SCO-6085R
1080p HD IR Bullet Camera

Imaging Device	1/2.8" CMOS	1/2.8" CMOS	1/2.8" CMOS	1/2.8" CMOS
Resolution	1920 x 1080	1920 x 1080	1920 x 1080	1920 x 1080
Min. Illumination	Color : 0.27Lux (F2.0) B/W : 0.017 Lux (F2.0)	Color : 0.11Lux (F1.6) B/W : 0Lux (IR LED on)	Color : 0.04Lux (F1.2, 1/30sec) BW : 0.004Lux (F1.2)	Color : 0.11Lux (F1.6) B/W : 0Lux (IR LED on)
Focal Length	2.8mm fixed (F2.0)	3.2~10mm (3.1x) motorized varifocal (HCV-6080R) varifocal (HCV-6070R)	-	3.2~10mm (3.1x) manual varifocal
Angular Field of View	H: 113.7° / V: 61.5° / D: 134.5°	H: 110.2° (Wide) ~ 32° (Tele) V: 55.4° (Wide) ~ 18° (Tele) D: 128.4° (Wide) ~ 36.6° (Tele)	-	H: 110.2° (Wide) ~ 32° (Tele) V: 55.4° (Wide) ~ 18° (Tele) D: 128.4° (Wide) ~ 36.6° (Tele)
Pan / Tilt / Rotate	0° ~ 350° / 0° ~ 67° / 0° ~ 355°	0° ~ 350° / 0° ~ 67° / 0° ~ 355°	-	-
IR Viewable Length	-	30m (98.43ft)	-	30m (98.42ft)
Day & Night	Auto (ICR)	Auto (ICR)	Auto (ICR)	Auto (ICR)
Backlight Compensation	WDR (120dB)	WDR (120dB)	BLC, HLC, DWDR	BLC, HLC, DWDR
Digital Noise Reduction	SSNRIV	SSNRIV	SSNRIV	SSNRIV
Motion detection	Support	Support	Support	Support
Privacy Masking	8 Zones	8 Zones	8 Zones	8 Zones
Alarm I/O	-	MD Output 1	0 / 1	0 / 1
Protocol	AHD : ACP (AHD Coax Protocol), CVBS : Pelco-C (Coaxitron), CCP (CVI Coax Protocol), TCP (TVI Coax Protocol)	AHD : ACP (AHD Coax Protocol), CVBS : Pelco-C (Coaxitron), CCP (CVI Coax Protocol), TCP (TVI Coax Protocol)	ACP (AHD Coax Protocol) CVBS : Pelco-C (Coaxitron)	AHD : ACP (AHD Coax Protocol), CVBS : Pelco-C (Coaxitron)
Operating Temperature	-10°C ~ +55°C (+14°F ~ +131°F)	-30°C ~ +55°C (-22°F ~ +131°F) * Start up above -10°C (+14°F)	-10°C ~ +55°C (+14°F ~ +131°F) / 0~90% RH	-30°C ~ +55°C (-22°F ~ +131°F)
Certification	-	IP66, IK10	-	IP66, IK10
Power Consumption	12VDC : Max 3.6W	12VDC & 24VAC : Max 5.8W (HCV-6080R) 12VDC & 24VAC : Max 4.2W (HCV-6070R)	AC 24V / 0.37A (Max 3.6W) DC 12V / 0.32A (Max 3.5W)	24VAC : Max 5.4W, typical 3.4W 12VDC : Max 5.4W, typical 3.4W
Dimensions (WxHxD) / Weight	Ø110 x 86mm (Ø4.33" x 3.39") 225g (0.49lb)	Ø137 x 106.1mm (Ø5.39" x 4.18") 725g (1.60lb) (HCV-6080R) 715g (1.58lb) (HCV-6070R)	W68.4 x H59.6 x D92.7mm (2.69" x 2.35" x 3.65") 186g (0.41lb)	Ø78 x 259.8mm (Ø3.07" x 10.23") 887g (1.95lb)
Additional Features	Video transmission up to 500m (5C2V Coaxial Cable)	Video transmission up to 500m (5C2V Coaxial Cable)	Video transmission up to 500m (5C2V Coaxial Cable)	Video transmission up to 500m (5C2V Coaxial Cable)



SCO-6025R
1080p HD IR Bullet Camera



SCD-6085R
1080p HD IR Dome Camera



SCD-6025R
1080p HD IR Dome Camera



SCV-6085R
1080p HD IR Vandal Dome Camera

Imaging Device	1/2.8" CMOS	1/2.8" CMOS	1/2.8" CMOS	1/2.8" CMOS
Resolution	1920 x 1080	1920 x 1080	1920 x 1080	1920 x 1080
Min. Illumination	Color: 0.11Lux (F1.6, 1/30sec) BW: 0Lux (IR LED on)	Color: 0.11Lux (F1.6, 1/30sec) BW: 0Lux (IR LED on)	Color: 0.17Lux (F1.6, 1/30sec) BW: 0Lux (IR LED on)	Color: 0.11Lux (F1.6, 1/30sec) BW: 0Lux (IR LED on)
Focal Length	4mm fixed	3.2~10mm (3.1x) varifocal	4mm fixed	3.2~10mm (3.1x) varifocal
Angular Field of View	H: 87.6° / V: 46.4° / D: 104.5°	H: 110.2° (Wide) ~ 32° (Tele) V: 55.4° (Wide) ~ 18° (Tele) D: 128.4° (Wide) ~ 36.6° (Tele)	H: 87.6° / V: 46.4° / D: 104.5°	H: 110.2° (Wide) ~ 32° (Tele) V: 55.4° (Wide) ~ 18° (Tele) D: 128.4° (Wide) ~ 36.6° (Tele)
Pan / Tilt / Rotate	-	0° ~ 350° / 0° ~ 67° / 0° ~ 355°	0° ~ 350° / 0° ~ 67° / 0° ~ 355°	0° ~ 350° / 0° ~ 67° / 0° ~ 355°
IR Viewable Length	30m (98.42ft)	20m (65.62ft)	20m (65.62ft)	30m (98.43ft)
Day & Night	Auto (ICR)	Auto (ICR)	Auto (ICR)	Auto (ICR)
Backlight Compensation	BLC, HLC, DWDR	BLC, HLC, DWDR	BLC, HLC, DWDR	BLC, HLC, DWDR
Digital Noise Reduction	SSNRIV	SSNRIV	SSNRIV	SSNRIV
Motion detection	Support	Support	Support	Support
Privacy Masking	8 Zones	8 Zones	8 Zones	8 Zones
Alarm I/O	0 / 1	0 / 1	0 / 1	-
Protocol	ACP (AHD Coax Protocol) CVBS: Pelco-C (Coaxitron)	ACP (AHD Coax Protocol) CVBS: Pelco-C (Coaxitron)	ACP (AHD Coax Protocol) CVBS: Pelco-C (Coaxitron)	ACP (AHD Coax Protocol) CVBS: Pelco-C (Coaxitron)
Operating Temperature	-30°C ~ +55°C (+14°F ~ +131°F) / 0~90% RH * Start up should be done at above -10°C	-10°C ~ +55°C (+14°F ~ +131°F) / 0~90% RH	-10°C ~ +55°C (+14°F ~ +131°F) / 0~90% RH	-30°C ~ +55°C (+14°F ~ +131°F) / 0~90% RH * Start up should be done at above -10°C
Certification	IP66	-	-	IP66, IK10
Power Consumption	DC 12V/0.45A (Max 5.4W)	AC 24V / 0.45A DC 12V / 0.46A	DC 12V/0.45A (Max 5.4W)	AC 24V / 0.45A DC 12V / 0.46A
Dimensions (WxHxD) / Weight	Ø58.6 x 165.2mm (Ø 2.31" x 6.5") (without sunshield) 279g (0.62lb)	Ø119.8 x 98.5mm (Ø4.72" x 3.88") 320g (0.7lb)	Ø110 x 86mm (Ø4.33" x 3.39") 227g (0.5lb)	Ø137 x 106.1mm (Ø5.39" x 4.18") 715g (1.57lb)
Additional Features	Video transmission up to 500m (5C2V Coaxial Cable)	Video transmission up to 500m (5C2V Coaxial Cable)	Video transmission up to 500m (5C2V Coaxial Cable)	Video transmission up to 500m (5C2V Coaxial Cable)



HRX-1635
16CH 8MP Pentabrid Recorder



HRX-1634
16CH 8MP Pentabrid Recorder



HRX-835
8CH 8MP Pentabrid Recorder



HRX-435
4CH 8MP Pentabrid Recorder



HRX-434
4CH 8MP Pentabrid Recorder

OS	Linux	Linux	Linux	Linux	Linux
Compression	H.264, H.265, MJPEG				
Signal Type	Analog (AHD, TVI, CVI, CVBS) & N/W Camera	Analog (AHD, TVI, CVI, CVBS) & N/W Camera	Analog (AHD, TVI, CVI, CVBS) & N/W Camera	Analog (AHD, TVI, CVI, CVBS) & N/W Camera	Analog (AHD, TVI, CVI, CVBS) & N/W Camera
Inputs	Analog 16CH, N/W Camera 2CH (up to 18CH)	Analog 16CH, N/W Camera 2CH (up to 18CH)	Analog 8CH, N/W Camera 2CH (up to 10CH)	Analog 4CH, N/W Camera 6CH (up to 10CH)	Analog 4CH, N/W Camera 6CH (up to 10CH)
Record Rate	8MP 8/8fps, 5MP 12/12fps, 4MP 15/12fps, 2MP 30/25fps NTSC/PAL *per CH	8MP 8/8fps, 5MP 12/12fps, 4MP 15/12fps, 2MP 30/25fps NTSC/PAL *per CH	8MP 8/8fps, 5MP 12/12fps, 4MP 15/12fps, 2MP 30/25fps NTSC/PAL *per CH	8MP 8/8fps, 5MP 12/12fps, 4MP 15/12fps, 2MP 30/25fps NTSC/PAL *per CH	8MP 8/8fps, 5MP 12/12fps, 4MP 15/12fps, 2MP 30/25fps NTSC/PAL *per CH
HDD Slot	SATA 8ea (Max 48TB)	SATA 2ea (Max 12TB)	SATA 4ea (Max 24TB)	Up to 2 SATA (Max 12TB)	Up to 1 SATA (Max 6TB)
Viewer Software	SSM, Webviewer, Wisenet Viewer, Wisenet mobile SUNAPI for integration to 3'rd party VMS	SSM, WebViewer, Wisenet Viewer, Wisenet Mobile	SSM, Webviewer, Wisenet mobile SUNAPI for integration to 3'rd party VMS	SSM, Webviewer, Wisenet mobile SUNAPI for integration to 3'rd party VMS	SSM, Webviewer, Wisenet mobile SUNAPI for integration to 3'rd party VMS
Local Display	1 HDMI, 1 VGA (Dual Monitor)	1 HDMI, 1 VGA (Dual Monitor)	1 HDMI, 1 VGA (Dual Monitor)	1 HDMI, 1 VGA	1 HDMI, 1 VGA
Audio In/Out	16 / 1	4 / 1	8 / 1	4 / 1	1 / 1
Alarm In/Out	16 / 4	16 / 4	8 / 4	4 / 2	4 / 1
N/W Camera Support	SUNAPI, ONVIF				
Additional Features	Easy configuration (Setup Wizard, P2P (QR Code)) Coaxial Control support (CVBS and AHD/CVI/TVI) RS-485 USB (2ports)	Easy configuration (Setup Wizard, P2P (QR Code)) Coaxial Control support (CVBS and AHD/CVI/TVI) RS-485 USB (3ports)	Easy configuration (Setup Wizard, P2P (QR Code)) Coaxial Control support (CVBS and AHD/CVI/TVI) RS-485 USB (2ports)	Easy configuration (Setup Wizard, P2P (QR Code)) Coaxial Control support (CVBS and AHD/CVI/TVI) RS-485 USB (2ports)	Easy configuration (Setup Wizard, P2P (QR Code)) Coaxial Control support (CVBS and AHD/CVI/TVI) RS-485 USB (2ports)

LED Monitor



SMT-4343
43" LED Monitor



SMT-3240
32" LED Monitor



SMT-3234
32" LED Monitor



SMT-2431
24" LED Monitor



SMT-2212
22" LED Monitor

	SMT-4343	SMT-3240	SMT-3234	SMT-2431	SMT-2212
Screen Size	43"	32"	32"	24"	22"
Max. Resolution	3840 x 2160	3840 x 2160	1920 x 1080	1920 x 1080	1920 x 1080
Brightness	300 cd/m ²	300 cd/m ²	300 cd/m ²	250 cd/m ²	250 cd/m ²
Contrast Ratio	1000:1	1000:1	2250:1	4000:1	3000:1
Aspect Ratio	16:9	16:9	16:9	16:9	16:9
Viewing Angle(H/V)	178° /178°	178° /178°	178° /178°	178° /178°	178° /178°
Response Time	8.5ms	14ms	8ms	14ms	6.5ms
Interface	HDMI (1), DP (1)	HDMI 2.0(1), DP1.2(1)	HDMI (1), VGA (1), DVI(1), BNC(1)	HDMI (1), VGA (1)	HDMI(1), VGA(1)
Audio In/Out	-/1	-/1	-/1	-/-	-/-
Built-in Speakers	Yes	Yes	Yes	-	-
VESA Mount(mm)	100*100/400*200	100*100	100*100	100*100	100*100
Power	100V ~ 240V AC	100V ~ 240V AC	100V ~ 240V AC	100V ~ 240V AC	DC 12V 5A
Stand	Optional	Yes	Optional	Yes	Yes
Tempered Glass Screen	-	-	-	-	-
Additional Features	Remote Controller	-	Remote Controller	-	-

Controller



SPC-7000
System Controller



SPC-2010
PTZ / DVR System Controller



SPC-2001
PTZ / DVR System Controller

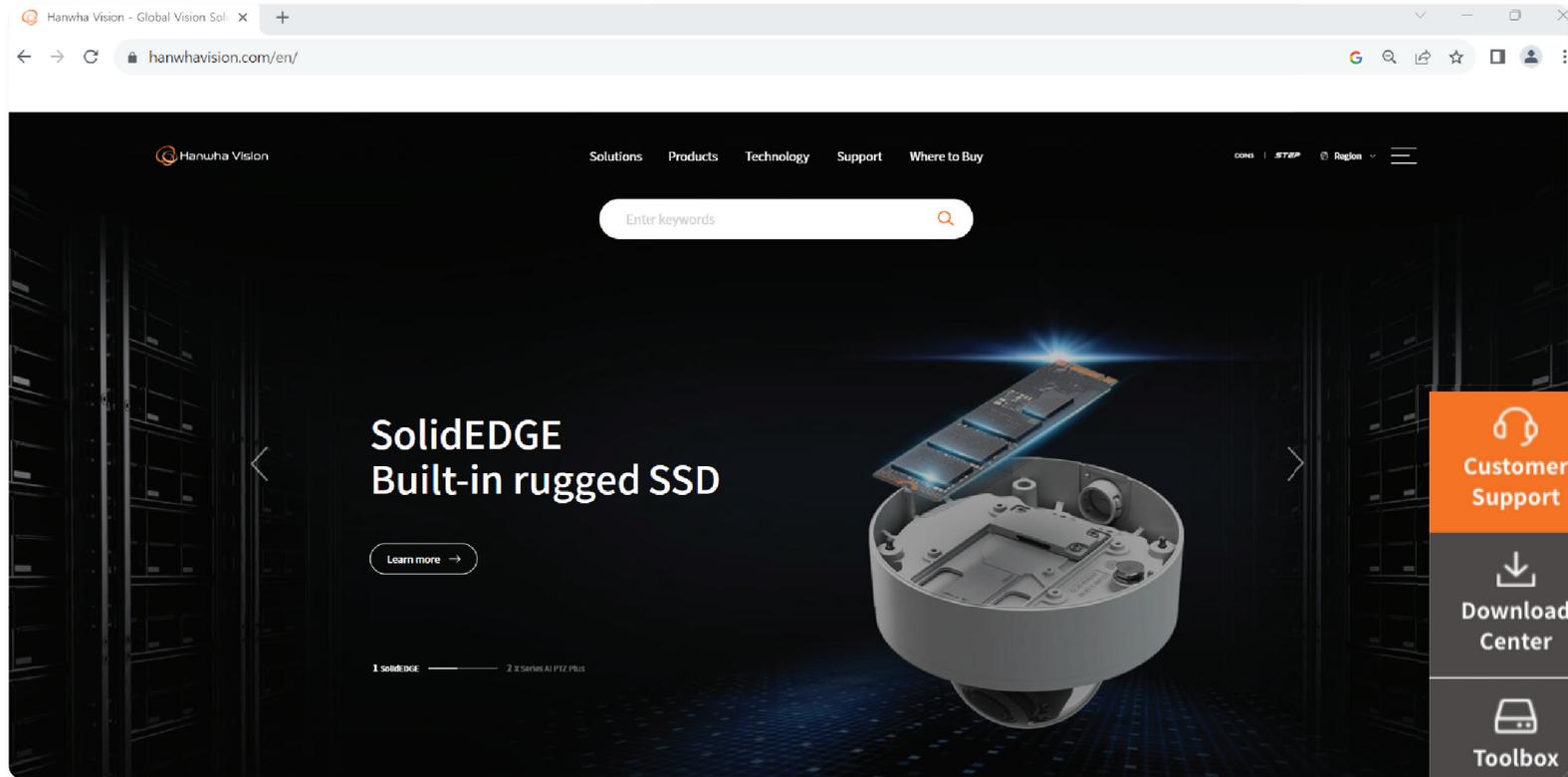


SPC-1010
PTZ Control Keyboard

	SPC-7000	SPC-2010	SPC-2001	SPC-1010
Features	<ul style="list-style-type: none"> 5" TFT Touch LCD Network Camera / SSM / Analog Camera / DVR Control User-Friendly Design and Easy-to-Use Keypad 3 Axis Joystick to Control PTZ Function Detachable Joystick / Jogshuttle for Universe Use (Right / Left Hand Use) USB Interface Support (1ea for SSM, 1ea for Image Snapshot / Upgrade) Fast Camera-Tile Mapping, Config Import / Export 	<ul style="list-style-type: none"> Control up to 255 PTZ Cameras / DVRs Built-in 3 Axis Twist Zoom Joystick Built-in Jog Shuttle 16 x 2 Character LCD Display RS-485 and RS-422 Interface 	<ul style="list-style-type: none"> Control up to 255 PTZ Cameras / DVRs Built-in 3 Axis Twist Zoom Joystick Built-in Jog Shuttle 16 x 2 Character LCD Display RS-485 and RS-422 Interface 	<ul style="list-style-type: none"> Control up to 255 PTZ Cameras Multi Protocols Supports OSD Menu, 3D Joystick Control RS-485 and RS-422 Interface

Lens

Model	Image	Mount	Image Format	Resolution	Focal Length	Back Focal Length	Zoom Ratio	F. No	Angle of View	Operation			Dimensions W x H x D (mm / inch)	Weight (g / lb)
										Iris	Focus	Zoom		
SLA-M8550D		CS	1 / 2.8"	3Megapixel	8.5 ~ 50mm (0.33" ~ 1.97")	9.4 ~ 10.7mm (0.37" ~ 0.42")	5.9	F1.6	42.3° ~ 7.5°	DC	Manual	Manual	W46 x H 60 x D 58.2mm (1.81" x 2.36" x 2.29")	80g (0.17lb)
SLA-M2890DN					2.8 ~ 9mm (0.11" ~ 0.35")	7.5 ~ 15.9mm (0.3" ~ 0.63")	3.2	1.2	134.2° ~ 42.7°				W45 x H 51.5 x D 54.3mm (1.77" x 2.03" x 2.14")	84g (0.19lb)
SLA-M2890PN					P-Iris	82.1g (0.18lb)								



Click the Toolbox Plus on Hanwha Vision.com

Choose product you are interested in

Select region and language

2 Network camera

3 Region: Global, Language: English

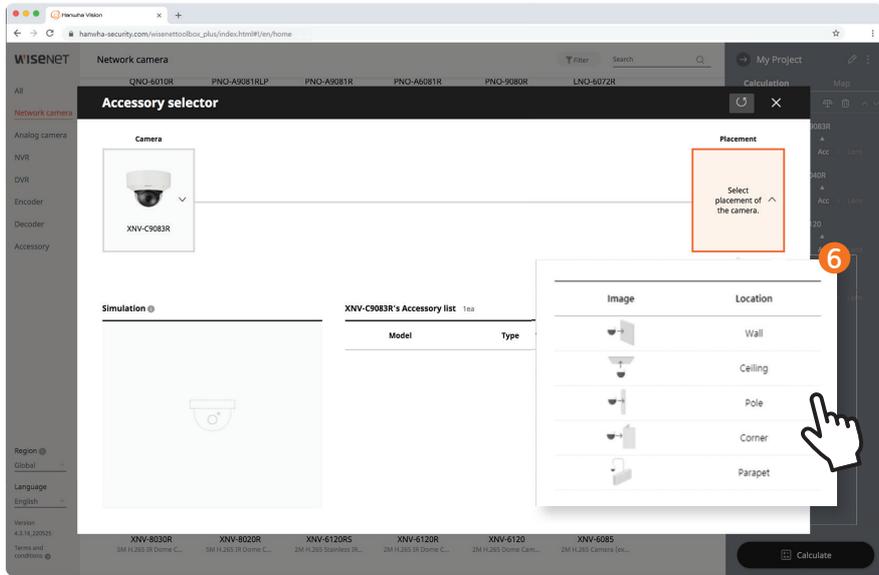
4 My Project: Calculation, Map

Selected cameras in project: XNV-C9083R, XNV-8040R, XNV-6120, XNV-6080

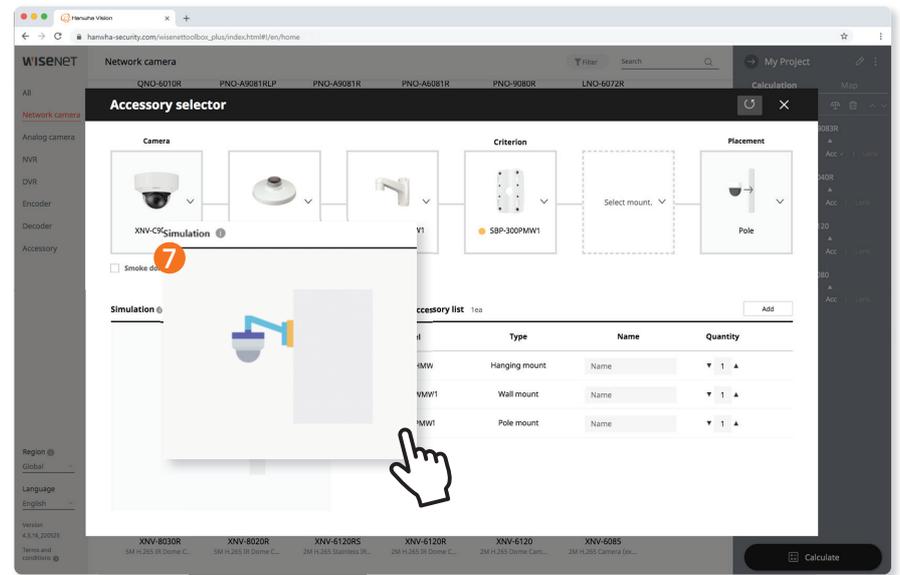
When you select cameras, they will be added on My Project

5 Acc

Click the Acc to find compatible accessories



Accessory Selector pops up. All compatible accessories are shown

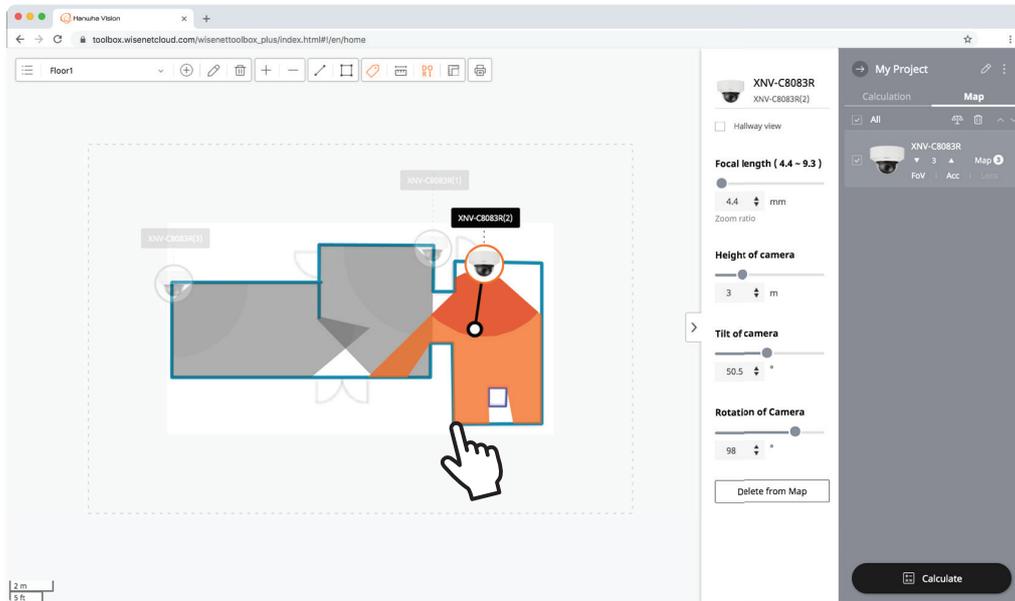
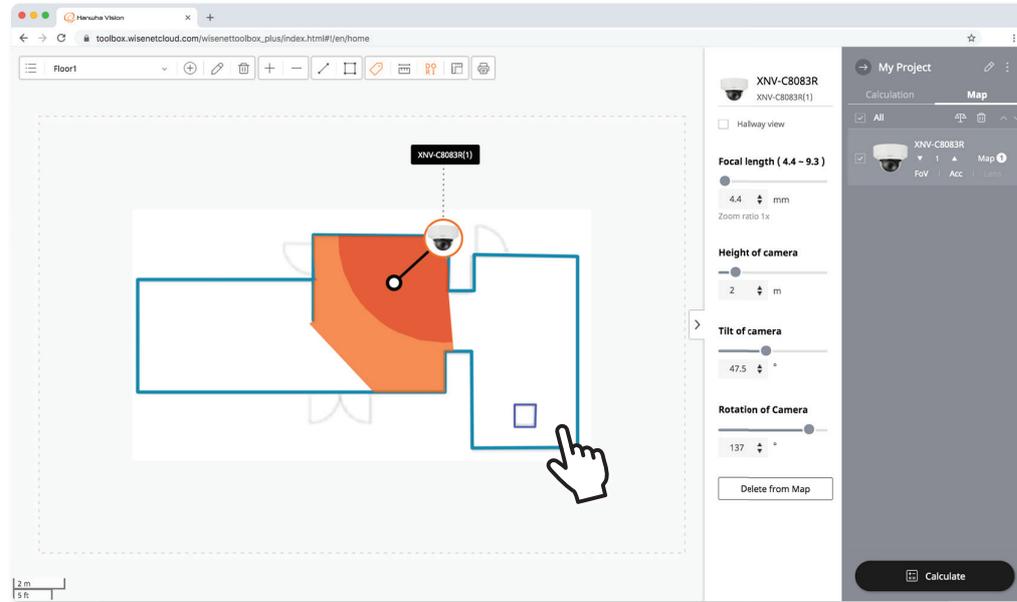


Choose accessories then the simulation intuitively shows all connected accessories



Newly updated in Toolbox Plus: Simulate on the map

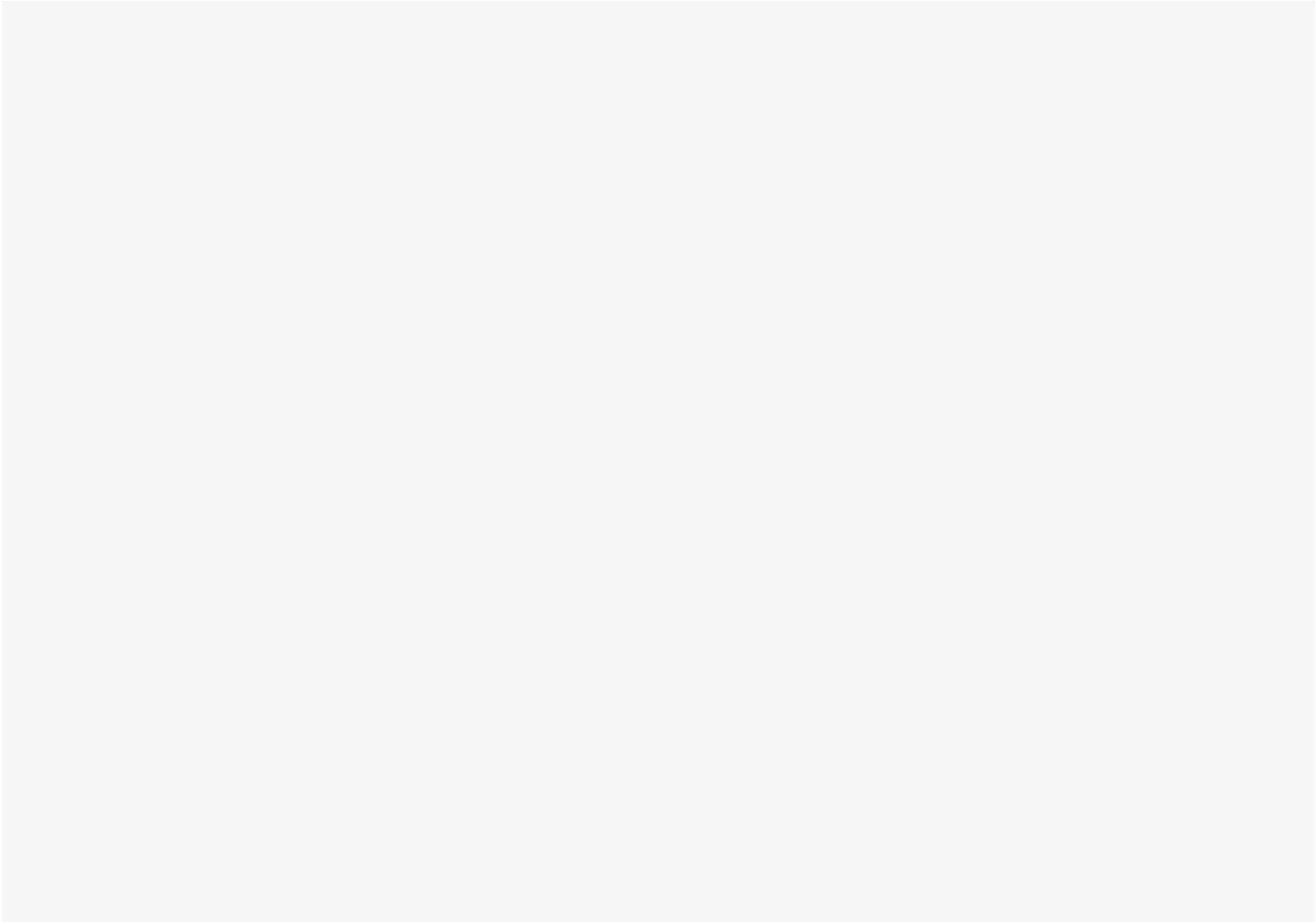
Toolbox Plus helps you simulate
the best place for installing cameras.



By uploading your map to Toolbox plus,
you can test how much
cameras can cover in your own space.

It can guide you on how to compose and install
cameras to minimize blind spots in advance.

MEMO



HEAD OFFICE

6, Pangyo-ro 319beon-gil, Bundang-gu, Seongnam-si,
Gyeonggi-do, 13488
For more information, please visit our website hanwhavision.com

Global Networks

Hanwha Vision America

Hanwha Vision Europe

Hanwha Vision MEA FZE

Hanwha Vision Oceania

Hanwha Vision Singapore Branch

Hanwha Vision Hanoi / Ho Chi Minh Office

www.hanwhavision.com/en

Scan this
QR code to find
our official partners.



© 2023 Hanwha Vision Co., Ltd. All rights reserved.

DESIGN AND SPECIFICATIONS ARE SUBJECT TO CHANGE WITHOUT NOTICE
Under no circumstances, this document shall be reproduced, distributed or changed,
partially or wholly, without formal authorization of Hanwha Vision Co., Ltd.
Hanwha Vision is formerly known as Hanwha Techwin.

REVISED 07-2023(M.H)